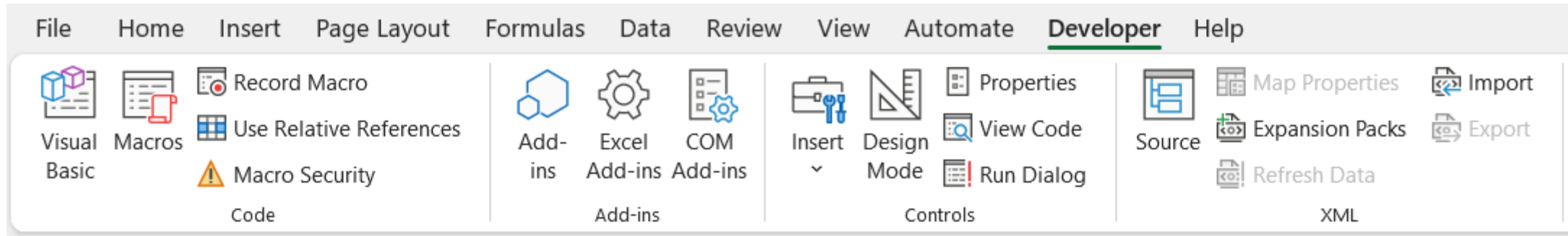
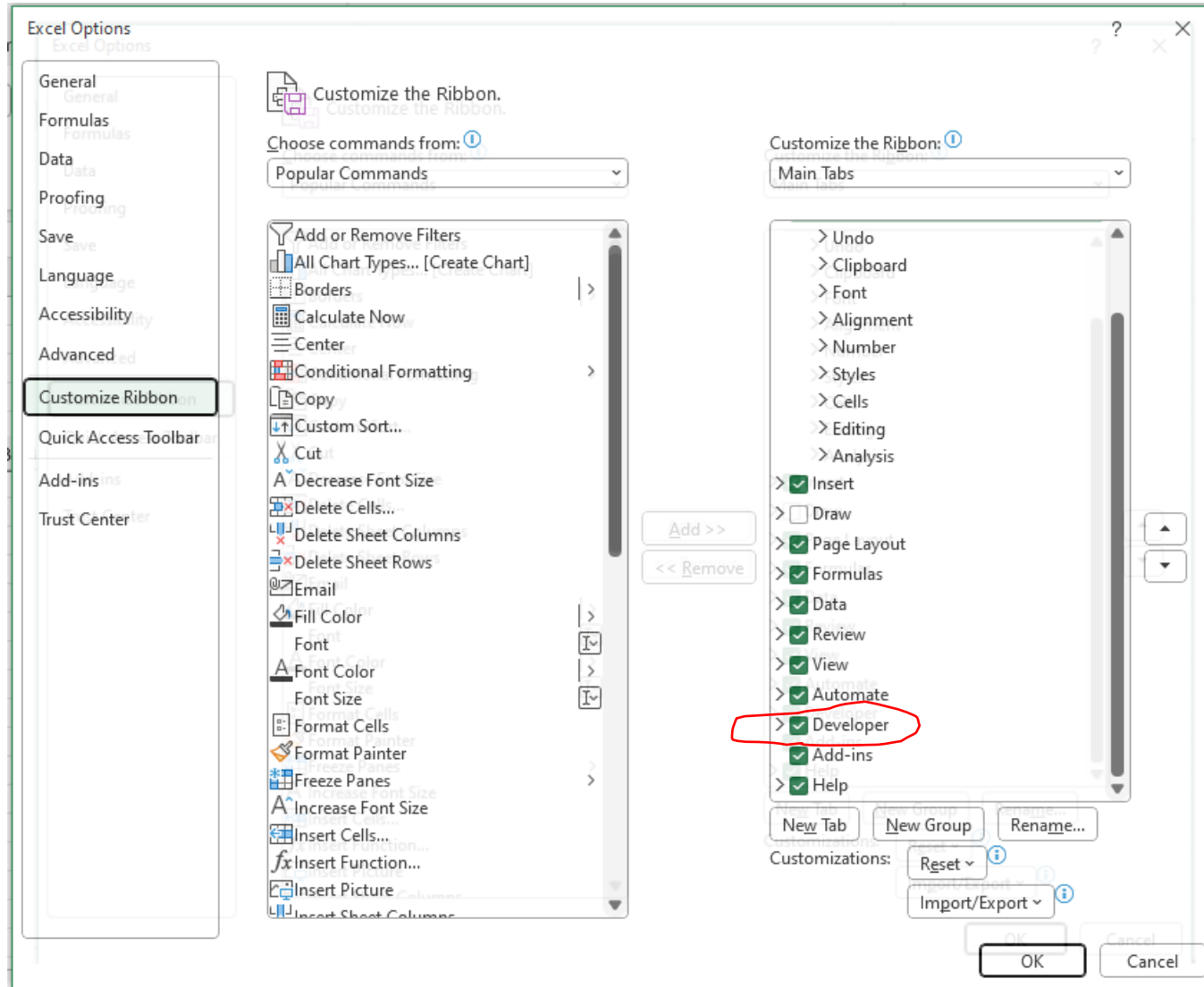


VBA

# karta Developer



# karta Developer



Excel file/options

use developer ribbon

# karta Developer

Opcje programu Excel

Popularne

Formuły

Sprawdzanie

Zapisywanie

Zaawansowane

Dostosowywanie




Dodatki


Centrum zaufania

Zasoby

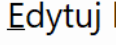
Zmiananie najbardziej popularnych opcji programu Excel

**Najczęściej używane opcje w pracy z programem Excel**


- Pokaż minipasek narzędzi przy zaznaczaniu 
- Włącz podgląd na żywo 
- Pokaż kartę Deweloper na Wstążce 


Schemat kolorów: Niebieski 

Styl etykietek ekranowych: Pokaż opisy funkcji w etykietkach ekranowych

Utwórz listy do użycia podczas sortowania i w sekwencjach wypełniania: 

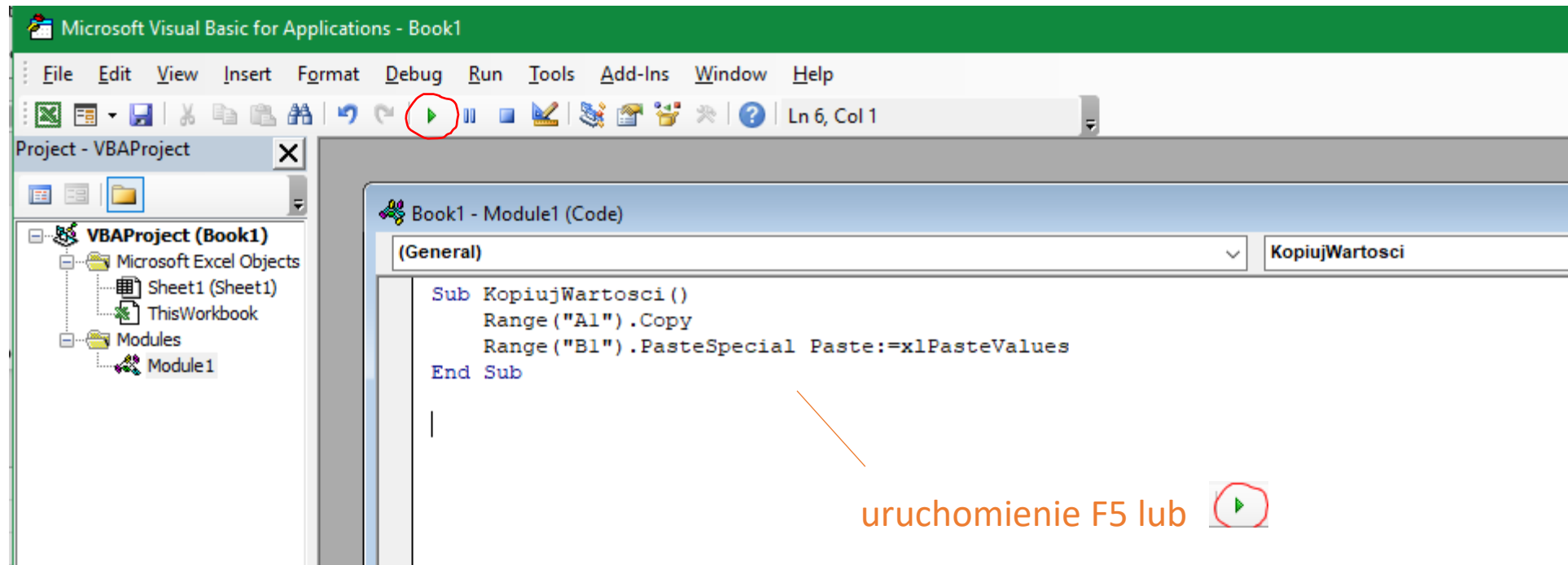
**Podczas tworzenia nowych skoroszytów**

Użyj tej czcionki: Czcionka tekstu podstawowego 

Rozmiar czcionki: 11 

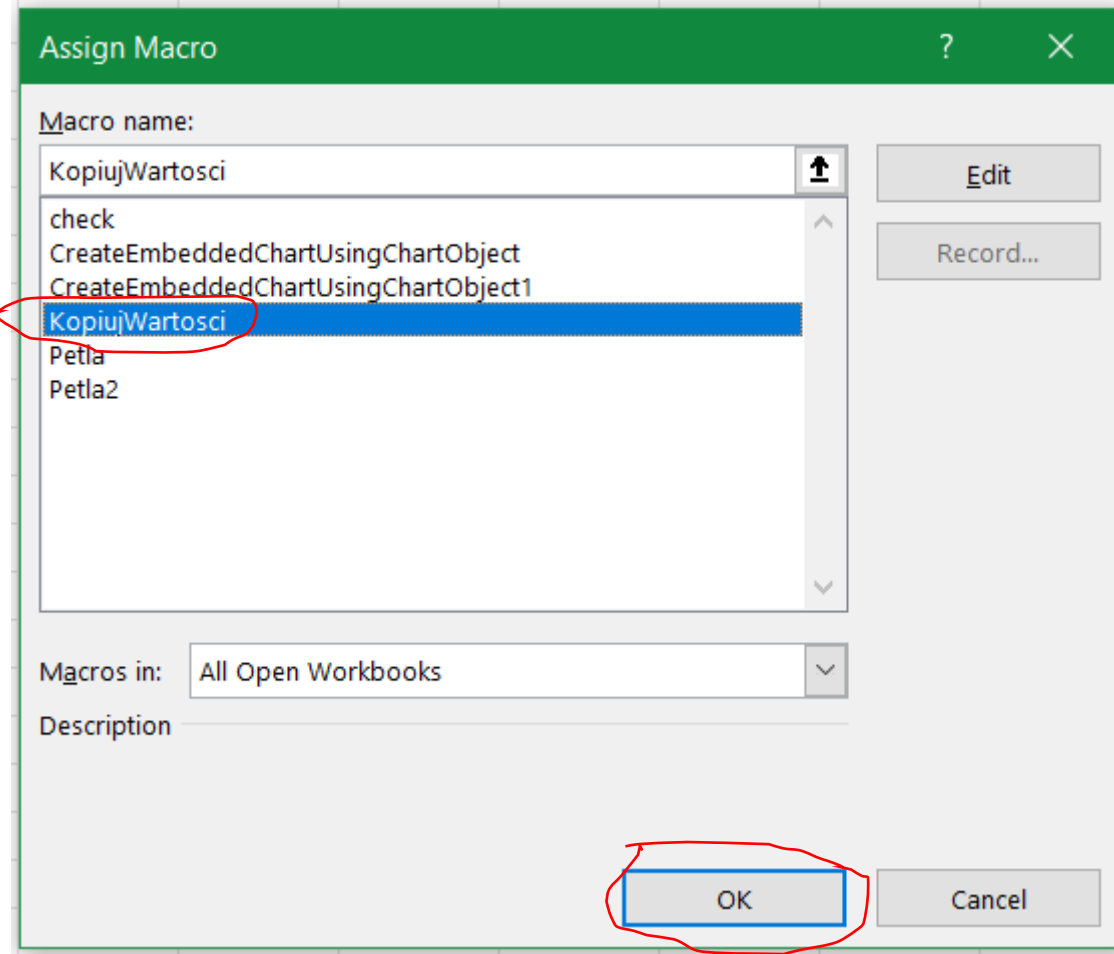
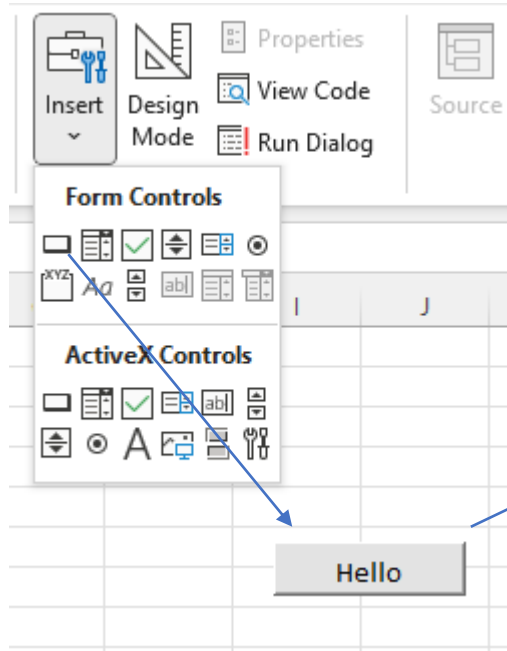
# Makro

Alt + F11

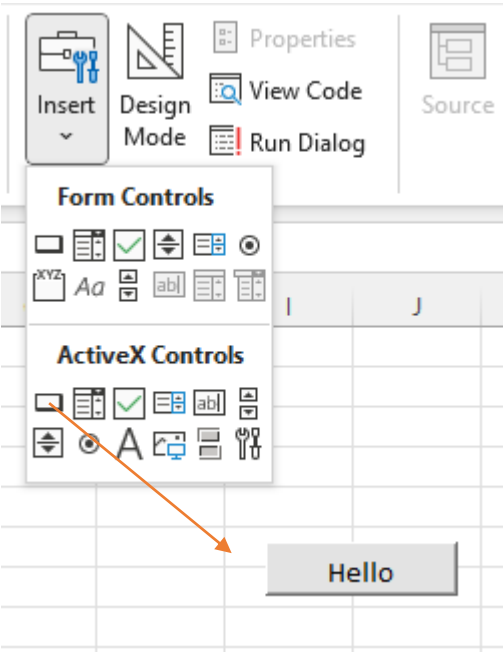


# przypisanie Makra do przycisku

karta Developer

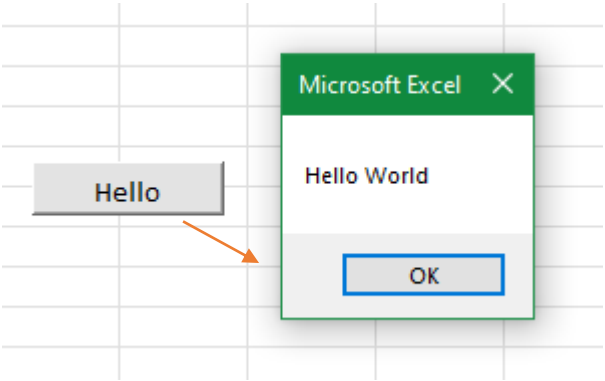


# Makro



developer ribbon

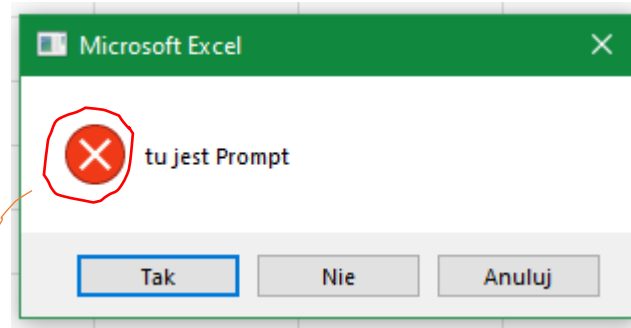
2x click



```
Book1 - Sheet1 (Code)  
CommandButton1  
Private Sub CommandButton1_Click()  
    MsgBox "Hello World"  
End Sub
```

# MsgBox

MsgBox



4 grupy opisu przycisku

```
Private Sub CommandButton2_Click()  
    MsgBox "tu jest Prompt", vbYesNoCancel + vbCritical + vbDefaultButton1 + vbSystemModal  
End Sub
```

przyciski Tak ,Nie, Anuluj

pierwszy przycisk jest domyślny

Modalny system;  
wszystkie aplikacje są zawieszane,  
dopóki użytkownik nie odpowie  
na okno komunikatu.

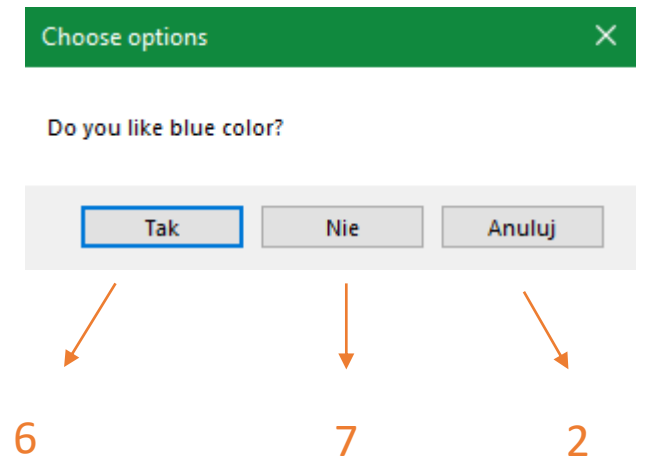
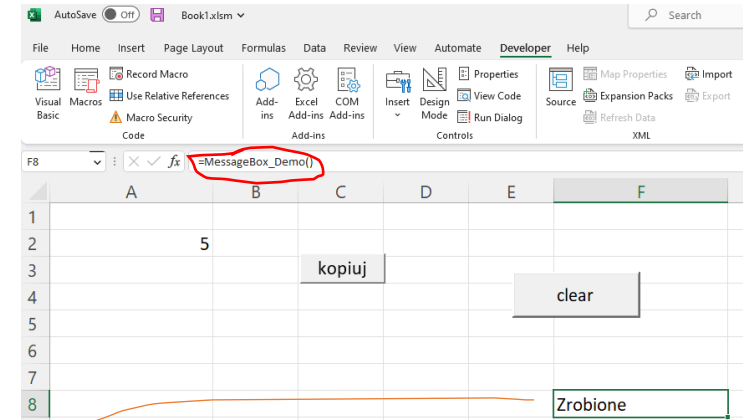


# MsgBox

```
(General)
Function MsgBox_Demo() As String
    'Message Box with just prompt message
    MsgBox ("Welcome")

    'Message Box with title, yes no and cancel Buttons
    a = MsgBox("Do you like blue color?", 3, "Choose options")
    ' Assume that you press No Button
    MsgBox ("The Value of a is " & a)
    If a = 6 Then
        'Range("A3").Value = "nacisnales Yes"
        MsgBox ("nacisnales Yes")
    ElseIf a = 2 Then
        'Range("A3").Value = "nacisnales Cancel"
        MsgBox ("nacisnales Cancel")
    Else
        'Range("A3").Value = "nacisnales NO"
        MsgBox ("nacisnales NO")
    End If
    MsgBox_Demo = "Zrobione"
End Function
```

wartość zwracana przez funkcję



# InputBox

	A	B	C	D	E
1	Pytania				
2					
3		2	4	=SUM(B3:C3)	answer
4					

	A	B	C	D	E
1	Pytania				
2					
3		2	4	=SUM(B3:C3)	answer
4					

Wynik

Wpisz wynik:

OK

Cancel

25

Wynik

Wpisz wynik:

OK

Cancel

6

	A	B	C	D	E
1	Pytania				
2					
3		2	4	=SUM(B3:C3)	answer
4					

	A	B	C	D	E
1	Pytania				
2					
3		2	4	=SUM(B3:C3)	answer
4					

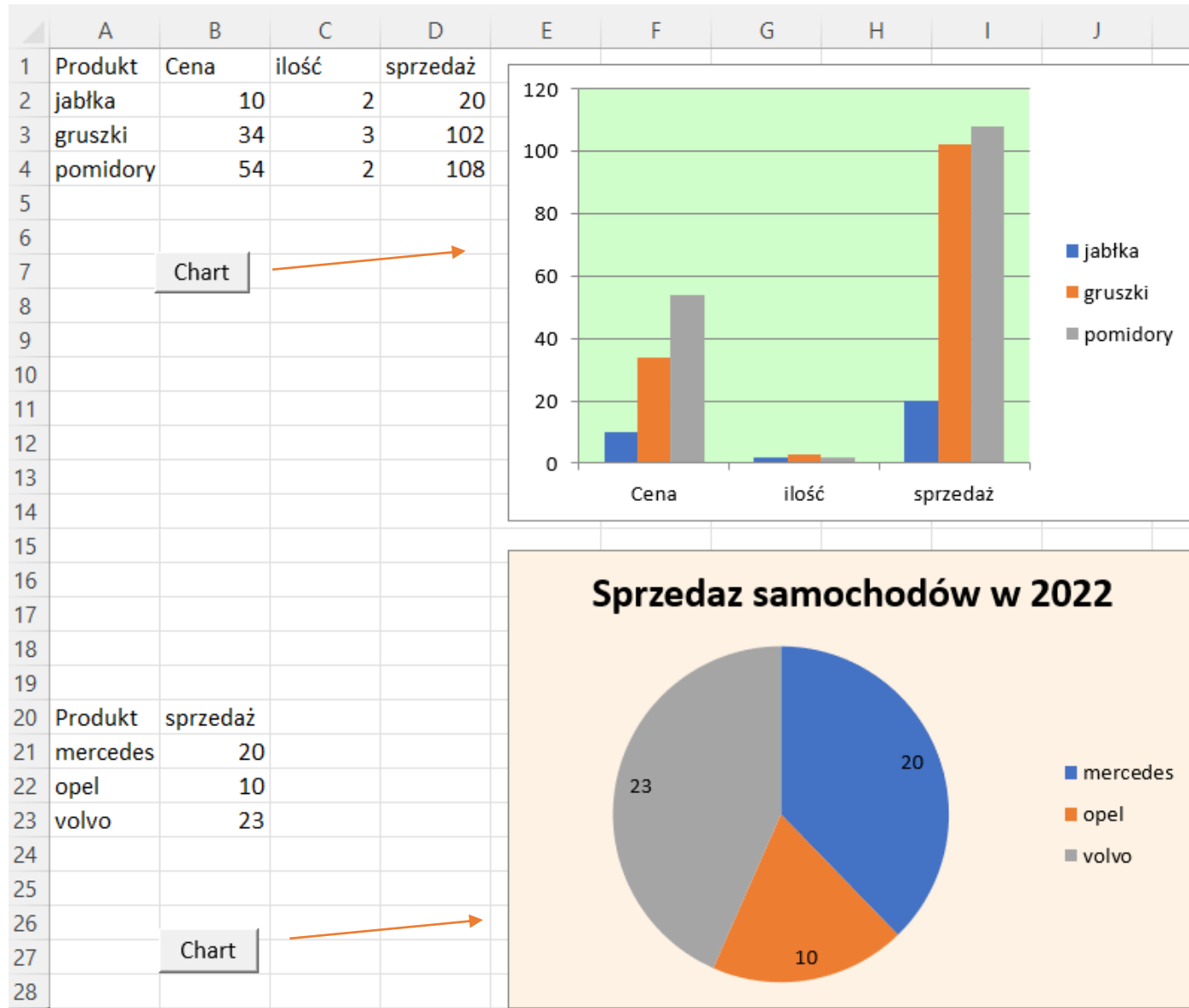
# InputBox

deklaracja zmiennej Result

```
Sub check()  
  Dim Result As String  
  Dim Wynik As Integer  
  Result = InputBox("Wpisz wynik:", "Wynik")  
  Wynik = Range("B3").Value + Range("C3").Value  
  
  If IsNumeric(Result) Then  
    If Result = Wynik Then  
      Range("D3").Interior.Color = RGB(0, 255, 0)  
    Else  
      Range("D3").Interior.Color = RGB(255, 0, 0)  
    End If  
  Else  
    MsgBox "wpisz wynik!", vbCritical  
  End If  
  
End Sub
```

funkcja IsNumeric(Result) sprawdza  
czy zmienna Result jest liczbą

# Chart



stwórz makra rysujące wykresy  
na podstawie informacji ze strony

<https://www.automateexcel.com/vba/charts-graphs/>

# Chart

```
(General)
Sub CreateEmbeddedChartUsingChartObject ()

Dim embeddedchart As ChartObject

Set embeddedchart = Sheets("Sheet3").ChartObjects.Add(Left:=200, Width:=300, Top:=7, Height:=200)
embeddedchart.Chart.SetSourceData Source:=Sheets("Sheet3").Range("A1:D4")
embeddedchart.Chart.PlotArea.Format.Fill.ForeColor.RGB = RGB(208, 254, 202)

End Sub

Sub CreateEmbeddedChartUsingChartObject1 ()

Dim embeddedchart1 As ChartObject

Set embeddedchart1 = Sheets("Sheet3").ChartObjects.Add(Left:=200, Width:=300, Top:=220, Height:=200)
embeddedchart1.Chart.SetSourceData Source:=Sheets("Sheet3").Range("A20:B23")
embeddedchart1.Chart.ChartType = xlPie
embeddedchart1.Chart.ChartTitle.Text = "Sprzedaz samochodów w 2022"
embeddedchart1.Chart.ChartArea.Format.Fill.ForeColor.RGB = RGB(253, 242, 227)
embeddedchart1.Chart.SetElement msoElementDataLabelInsideEnd

End Sub
```

# Pętla

	A	B	C	D	E	F	G	H	I	J	K
4											
5											
6		a	10	2	3	12	11	7			
7		a*a	100	4	9	144	121	49			
8		sqr									
9											
10											
11											
12											

petla2

```
Sub Petla2()  
  Dim c As Range  
  
  Dim i As Integer  
  i = 3  
  
  For Each c In Range("C6:H6")  
    'row, column  
    Worksheets("Sheet4").Cells(7, i) = c.Value * c.Value  
    i = i + 1  
  Next c  
  
End Sub
```

implementacja kwadratu liczb

[http://www.mielk.pl/pl/kursy/kurs\\_vba/kurs\\_10\\_petla\\_for.php](http://www.mielk.pl/pl/kursy/kurs_vba/kurs_10_petla_for.php)

<https://datatalk.pl/funkcje-vba-excel/>

# Pętla

	A	B	C	D	E	F	G	H	I	J	K	L
16												
17												
18		<b>a</b>	<b>a*a</b>	<b>sqr</b>								
19		2	4									
20		3	9									
21		4	16									
22		12	144									
23		34	1156									
24		4	16									
25												

petla1

```
Sub Petla()  
  Dim c As Range  
  
  Dim i As Integer  
  i = 19  
  
  For Each c In Range("B19:B24")  
    Range("C" & i).Value = c.Value * c.Value  
    i = i + 1  
  Next c  
  
End Sub
```

implementacja kwadratu liczb

# Liczby pierwsze

(General)

```
Private Sub CommandButton1_Click()  
    Dim c As Range  
  
    For Each c In Range("A1:CV1")  
        If c.Value <> 1 Then      ' 1 nie jest liczba pierwsza  
            If IsPrime(c) Then    ' sprawdza kazda liczba z zakresu  
                c.Interior.Color = RGB(0, 255, 0)  
            End If  
        End If  
    Next c  
End Sub
```

End Sub

' funkcja sprawdzajaca czy dana liczba jest pierwsza

Function IsPrime(c As Range) As Boolean

```
    Dim czyPierwsza As Boolean
```

```
    Dim i As Integer
```

```
    czyPierwsza = True
```

```
    i = 2
```

```
    Do While i * i <= c.Value
```

```
        If c.Value Mod i = 0 Then
```

```
            czyPierwsza = False
```

```
            Exit Do
```

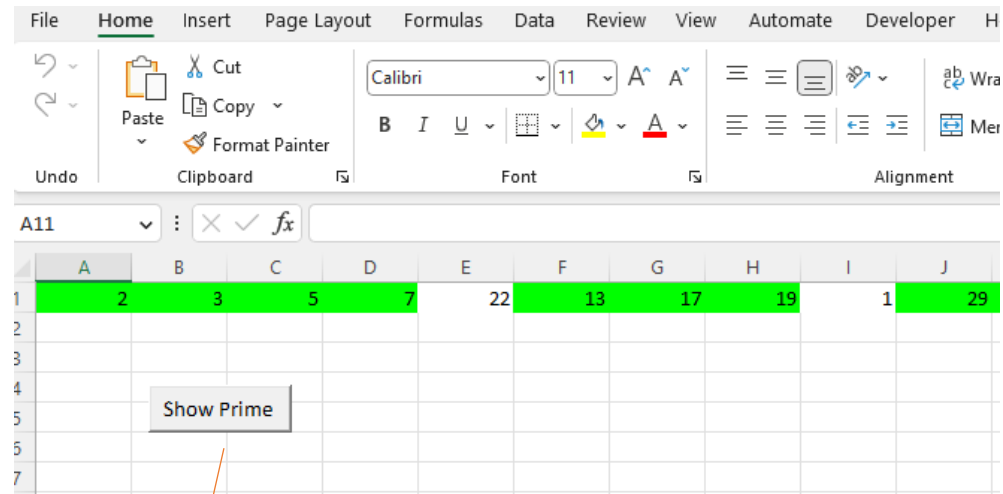
```
        End If
```

```
        i = i + 1
```

```
    Loop
```

```
    IsPrime = czyPierwsza
```

End Function



makro koloruje na zielono tło liczb pierwszych



# Instrukcja warunkowa, formatowanie warunkowe

Moje stopnie	
matematyka	nazwy
2	dwójka
4	czwórka
3	trójka
5	piątka
3	trójka
6	szóstka
1	jedynka

legenda	
1	jedynka
2	dwójka
3	trójka
4	czwórka
5	piątka
6	szóstka

napisz formułę konfigurującą komórkę obok stopnia wg. wzoru

# formuła konfigurująca komórkę

=IF(D7=1;"jedynka";IF(D7=2;"dwójka";IF(D7=3;"trójka";IF(D7=4;"czwórka";IF(D7=5;"piątka";IF(D7=6;"szóstka"))))))

	A	B	C	D	E
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

Moje stopnie	
matematyka	nazwy
2	dwójka
4	czwórka
3	trójka
5	piątka
3	trójka
6	szóstka
1	jedynka

Conditional Formatting Rules Manager

Show formatting rules for: This Worksheet

New Rule... Edit Rule... Delete Rule Duplicate Rule

Rule (applied in order shown)	Format	Applies to	Stop If True
Cell Value = "szóstka"	AaBbCcYyZz	= \$E\$7:\$E\$13	<input type="checkbox"/>
Cell Value = "piątka"	AaBbCcYyZz	= \$E\$7:\$E\$13	<input type="checkbox"/>
Cell Value = "czwórka"	AaBbCcYyZz	= \$E\$7:\$E\$13	<input type="checkbox"/>
Cell Value = "trójka"	AaBbCcYyZz	= \$E\$7:\$E\$13	<input type="checkbox"/>
Cell Value = "dwójka"	AaBbCcYyZz	= \$E\$7:\$E\$13	<input type="checkbox"/>
Cell Value = "jedynka"	AaBbCcYyZz	= \$E\$7:\$E\$13	<input type="checkbox"/>

OK Close Apply

formatowanie warunkowe

# VBA

napisz makro konfigurujące  
komórkę obok stopnia wg. wzoru

fizyka	nazwa
1	
2	
3	
4	
5	
6	

CommandBut



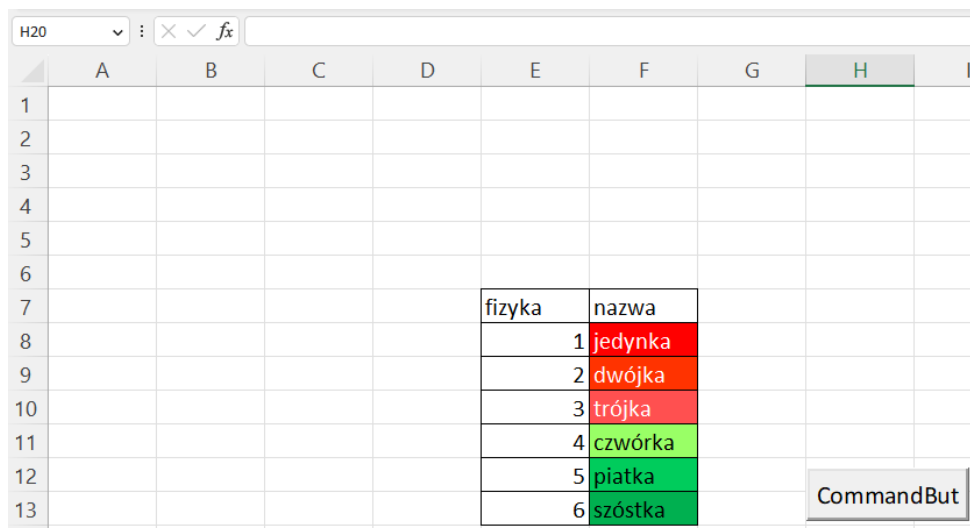
fizyka	nazwa
1	jedynka
2	dwójka
3	trójka
4	czwórka
5	piątka
6	szóstka

CommandButt

legenda

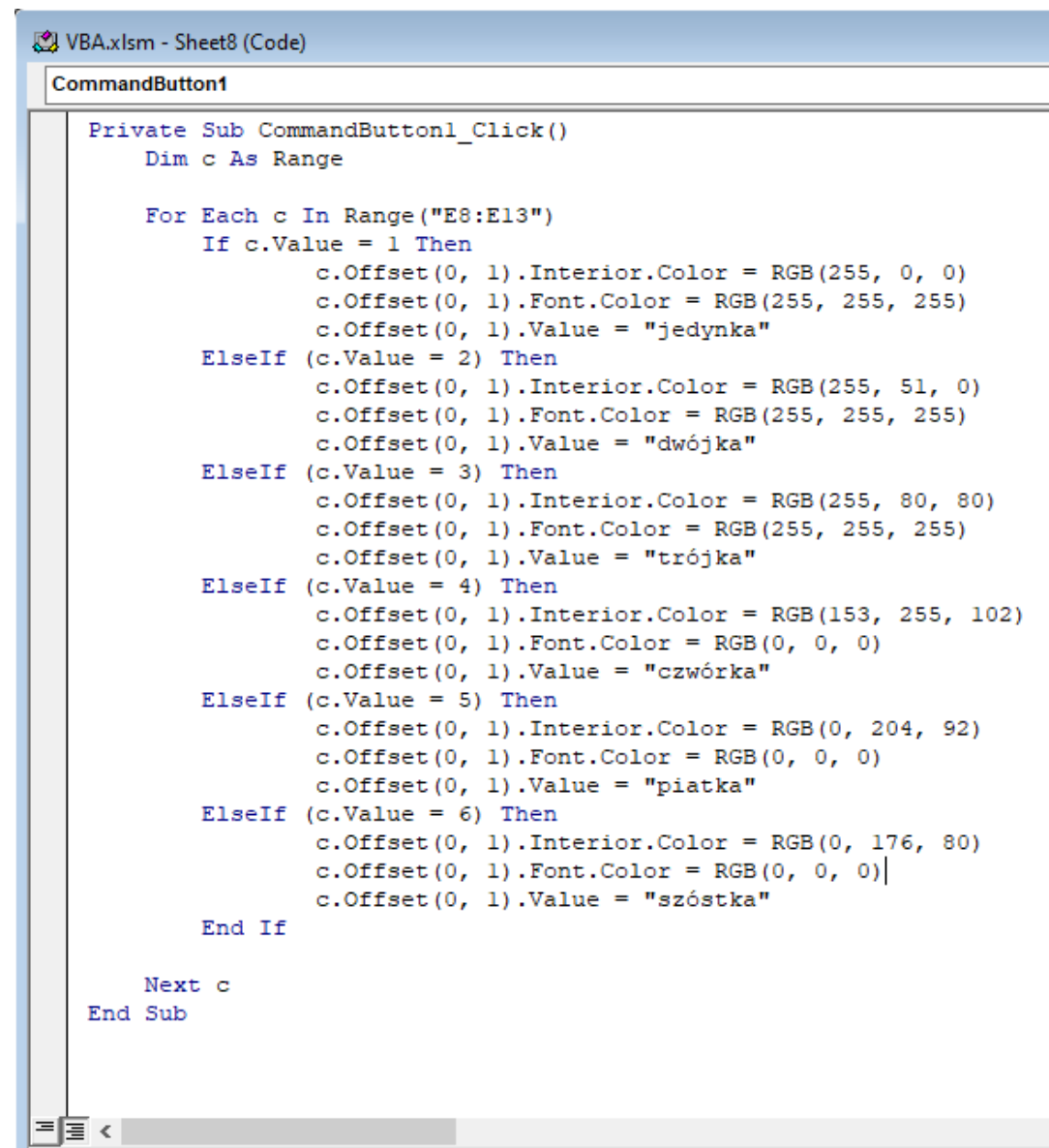
1	jedynka
2	dwójka
3	trójka
4	czwórka
5	piątka
6	szóstka

# makro konfigurujące komórkę



The screenshot shows an Excel spreadsheet with a table of physics grades. The table is located in the range E8:F13. The first column (E) is labeled 'fizyka' and the second column (F) is labeled 'nazwa'. The rows contain grades from 1 to 6, each with a corresponding color: 1 (red), 2 (orange), 3 (red), 4 (green), 5 (green), and 6 (green). A command button labeled 'CommandBut' is located in cell H12. An orange arrow points from the button to the VBA code window.

fizyka	nazwa
1	jedynka
2	dwójka
3	trójka
4	czwórka
5	piątka
6	szóstka



The screenshot shows the VBA code editor for the macro 'CommandButton1'. The code is written in VBA and uses a 'For Each' loop to iterate through the range 'E8:E13'. For each cell 'c' in the range, the code checks the value of 'c' and sets the interior color, font color, and value of the cell to match the grade in the table. The code is as follows:

```
Private Sub CommandButton1_Click()  
    Dim c As Range  
  
    For Each c In Range("E8:E13")  
        If c.Value = 1 Then  
            c.Offset(0, 1).Interior.Color = RGB(255, 0, 0)  
            c.Offset(0, 1).Font.Color = RGB(255, 255, 255)  
            c.Offset(0, 1).Value = "jedynka"  
  
        ElseIf (c.Value = 2) Then  
            c.Offset(0, 1).Interior.Color = RGB(255, 51, 0)  
            c.Offset(0, 1).Font.Color = RGB(255, 255, 255)  
            c.Offset(0, 1).Value = "dwójka"  
  
        ElseIf (c.Value = 3) Then  
            c.Offset(0, 1).Interior.Color = RGB(255, 80, 80)  
            c.Offset(0, 1).Font.Color = RGB(255, 255, 255)  
            c.Offset(0, 1).Value = "trójka"  
  
        ElseIf (c.Value = 4) Then  
            c.Offset(0, 1).Interior.Color = RGB(153, 255, 102)  
            c.Offset(0, 1).Font.Color = RGB(0, 0, 0)  
            c.Offset(0, 1).Value = "czwórka"  
  
        ElseIf (c.Value = 5) Then  
            c.Offset(0, 1).Interior.Color = RGB(0, 204, 92)  
            c.Offset(0, 1).Font.Color = RGB(0, 0, 0)  
            c.Offset(0, 1).Value = "piątka"  
  
        ElseIf (c.Value = 6) Then  
            c.Offset(0, 1).Interior.Color = RGB(0, 176, 80)  
            c.Offset(0, 1).Font.Color = RGB(0, 0, 0)  
            c.Offset(0, 1).Value = "szóstka"  
  
        End If  
  
    Next c  
End Sub
```

# obróbka danych

- WASTE
- Overview
- Data
  - Main tables
  - DATABASE**
  - Indicators
  - Publications
  - Methodology
  - Legislation
  - Policy context
  - Targets
  - Links

Waste (env\_was)

- Waste generation and treatment (env\_wasgt)
  - Generation of waste by waste category, hazardousness and NACE Rev. 2 activity (env\_wasgen)
  - Treatment of waste by waste category, hazardousness and waste management operations (env\_wastrt)
  - Management of waste excluding major mineral waste by waste management operations (env\_wasgeop)
  - Management of waste excluding major mineral (env\_wasflow)
  - Number and capacity of recovery and disposal
  - Management of waste by waste management operations
- Waste streams (env\_wasst)
  - Food waste and food waste prevention by NACE
  - Trade in waste by type of material and partner
  - Packaging waste by waste management operations
  - Recycling rates of packaging waste for monitoring
  - Waste electrical and electronic equipment (WEEE) categories (from 2018 onwards) (env\_waseleo)
  - Waste electrical and electronic equipment (WEEE)
  - Sales and collection of portable batteries and accumulators
  - Recycling of batteries and accumulators (env\_wabatt)
  - End-of-life vehicles by waste management operations
  - End-of-life vehicles - reuse, recycling and recovery
  - Transboundary shipments of notified waste by waste management operations (env\_wasship)
  - Municipal waste by waste management operations

Generation of waste by waste category, hazardousness and NACE Rev. 2 activity

online data code: ENV\_WASGEN last update: 13/01/2023 23:00 view: DEFAULT

Source of data: Eurostat

Selection: Format: Download

Row: Geographical entity (reporting) (A0/A0) 40 values displayed


Column: Time (T/Y) 9 values displayed

Page: Hazardous and non-hazardous - Total Waste categories (45/45) Total waste

Unit of measure: Tonne (T/2)

Statistical classification of econ.: All NACE activities plus house...

	2004 g	2006 g	2008 g	2010 g	2012 g	2014 g	2016 g	2018 g	2020 g
European Union - 27 countries (from 2020)	2 248 798 000	2 276 128 000	2 144 798 000	2 212 980 000	2 242 548 000	2 243 798 000	2 228 918 000	2 228 228 000	2 152 938 000
European Union - 28 countries (2019-2020)	2 547 026 000	2 567 278 000	2 427 488 000	2 454 716 000	2 483 808 000	2 506 798 000	2 528 988 000	2 528 488 000	2 428 488 000
Belgium	52 989 345	59 351 721	48 621 816	61 348 983	52 828 478	57 962 932	61 182 284	63 187 478	63 861 358
Bulgaria	281 828 487	162 881 368	167 646 316	167 396 268	161 252 166	179 817 811	128 988 475	128 751 823	116 387 358
Croatia	29 275 743	24 745 752	25 419 895	23 757 566	23 284 956	23 281 626	27 847 814	28 488 186	28 488 186
Czechia	22 588 922	14 789 188	15 155 288	16 272 726	28 888 843	28 891 621	27 442 286	28 155 564	28 155 564
Germany (incl 1990 former territory of the FRG)	344 821 937	363 788 869	372 795 355	363 544 955	368 822 172	387 884 241	488 871 672	485 523 624	481 156 266
Estonia	28 884 889	18 932 855	19 583 855	19 888 195	21 922 243	21 884 848	24 277 875	23 188 581	18 181 973
Ireland	24 499 142	29 598 175	22 582 818	19 887 588	12 713 821	15 166 538	15 251 489	15 948 757	15 192 853

 env\_wasgen\_page\_spreadsheet.xlsx  
Pobieranie ukończone — 16,9 KB

Options and other formats

Data on this page only

- Spreadsheet (.xlsx)
- SDMX-CSV (1 observation = 1 row)
- TSV (1 time-series = 1 row)

Custom dataset [ENV\_WASGEN\$DEFAULTVIEW]

- Spreadsheet (.xlsx)
- SDMX-CSV (1 observation = 1 row)
- TSV (1 time-series = 1 row)

Full dataset [ENV\_WASGEN]

- SDMX-CSV (1 observation = 1 row)
- TSV (1 time-series = 1 row)

Extra options

- compress text files (.tsv, .csv)

Eurostat is the statistical office of the European Union

# obróbka danych

generowanie śmieci przez poszczególne kraje

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	Data extracted on 17/04/2023 09:56:40 from [ESTAT]																
2	Dataset: Generation of waste by waste category, hazardousness and NACE Rev. 2 activity [ENV_WASGEN_custom_5806517]																
3	Last updated: 13/01/2023 23:00																
4																	
5	Time frequency																
6	Unit of measure																
7	Hazard class																
8	Statistical classification of economic activities in the European Community (NACE Rev. 2)																
9	Waste categories																
10																	
11		TIME	2004	2006	2008	2010	2012	2014	2016	2018	2020						
12	GEO (Labels)											mediana					
13	European Union - 27 countries (from	2 248 790 000	2 278 120 000	2 144 780 000	2 212 900 000	2 242 540 000	2 243 790 000	2 258 910 000	2 338 230 000	2 152 930 000		spadek	2 243 790 000				
14	European Union - 28 countries (2013	2 547 590 000	2 587 270 000	2 427 000 000	2 454 710 000	2 483 800 000	2 508 780 000	2 530 980 000	2 620 400 000				2 518 880 000				
15	Belgium	52 809 345	59 351 721	48 621 916	61 345 803	53 839 470	57 965 392	63 152 384	68 187 479	68 061 590		spadek	59 351 721				
16	Bulgaria	201 020 467	162 881 368	167 646 316	167 396 268	161 252 166	179 677 011	120 508 475	129 751 823	116 387 350		spadek	162 881 368	min		312180	
17	Czechia	29 275 743	24 745 752	25 419 695	23 757 566	23 171 358	23 394 956	25 381 426	37 847 614	38 486 186		wzrost	25 381 426	max		405 523 624	
18	Denmark	12 588 952	14 703 138	15 155 208	16 217 736	16 713 822	20 808 843	20 981 931	21 445 206	20 135 564		spadek	16 713 822	average		75 287 329	
19	Germany (until 1990 former territory	364 021 937	363 786 069	372 796 355	363 544 995	368 022 172	387 504 241	400 071 672	405 523 624	401 156 266		spadek	372 796 355	>average			
20	Estonia	20 860 680	18 932 903	19 583 855	19 000 195	21 992 343	21 804 040	24 277 879	23 185 581	16 181 973		spadek	20 860 680	wzrost		wzrost na podstawie 2018 oraz 2020	
21	Ireland	24 499 142	29 599 175	22 502 816	19 807 586	12 713 021	15 166 830	15 251 689	13 986 757	16 192 033		wzrost	16 192 033	spadek		spadek na podstawie 2018 oraz 2020	
22	Greece	33 346 962	51 324 662	68 643 963	70 432 705	72 328 280	69 758 868	72 332 353	45 240 333	28 943 897		spadek	68 643 963				
23	Spain	160 668 134	160 946 629	149 254 157	137 518 902	118 561 669	110 518 494	128 958 523	137 822 935	105 624 359		spadek	137 518 902	mediana		średkowa wartość w posortowanym zbiorze liczb	
24	France	296 580 889	312 297 824	345 002 210	355 081 245	344 440 922	324 462 969	322 685 297	343 307 326	310 373 987		spadek	324 462 969				
25	Croatia	7 208 688	5 425 973	4 172 152	3 157 672	3 611 678	3 724 563	5 366 953	5 543 310	6 003 760		wzrost	5 366 953				
26	Italy	139 806 106	155 025 054	179 257 461	158 627 618	154 427 046	157 870 348	163 827 838	172 502 773	174 887 620		wzrost	158 627 618				
27	Cyprus	2 241 520	1 248 723	1 842 781	2 372 750	1 875 308	1 978 699	2 467 042	2 302 144	2 219 531		spadek	2 219 531				
28	Latvia	1 257 225	1 858 551	1 495 084	1 498 200	2 309 581	2 621 495	1 909 631	1 773 726	2 852 792		wzrost	1 858 551				
29	Lithuania	7 010 178	6 361 109	6 333 352	5 578 134	5 678 751	6 200 450	6 674 238	7 080 538	6 695 731		spadek	6 361 109				
30	Luxembourg	8 315 766	8 378 911	9 592 144	10 441 469	8 397 228	7 072 758	10 020 519	9 014 397	9 215 222		wzrost	9 014 397				
31	Hungary	24 660 920	22 287 476	16 949 197	16 735 423	16 310 151	16 650 639	15 938 077	18 369 585	16 063 842		spadek	16 735 423				
32	Malta	3 146 062	2 861 489	2 070 391	1 352 994	1 456 213	1 672 810	1 951 928	2 507 070	3 000 546		wzrost	2 070 391				
33	Netherlands	92 448 121	99 166 563	102 648 605	121 145 468	121 194 466	132 362 297	141 024 020	145 245 469	125 138 771		spadek	121 194 466				
34	Austria	53 020 950	54 286 603	56 308 766	46 799 579	48 045 089	55 868 298	61 225 037	65 666 128	68 906 034		wzrost	55 868 298				
35	Poland	137 478 449	153 628 937	138 984 638	158 661 957	162 382 959	179 179 899	182 005 677	175 473 691	170 233 670		spadek	162 382 959				
36	Portugal	29 317 295	34 952 771	16 882 923	13 640 079	13 359 517	14 368 003	14 739 135	15 894 873	16 601 514		wzrost	15 894 873				
37	Romania	369 300 408	344 356 921	189 138 507	201 432 951	249 354 926	176 607 415	177 562 905	203 017 193	141 364 457		spadek	201 432 951				
38	Slovenia	5 770 505	6 035 829	5 038 401	5 986 106	4 546 506	4 686 417	5 494 362	8 220 679	7 518 375		spadek	5 770 505				
39	Slovakia	10 668 411	14 501 495	11 472 008	9 384 112	8 425 384	8 862 778	10 606 966	12 401 870	12 775 926		wzrost	10 668 411				
40	Finland	69 708 476	72 205 476	81 792 854	104 336 944	91 824 193	95 969 888	122 869 183	128 251 735	116 082 531		spadek	95 969 888				
41	Sweden	91 759 469	94 971 307	86 168 590	117 645 185	156 306 504	167 026 886	141 625 718	138 667 585	151 823 910		wzrost	138 667 585				
42	Iceland	501 426		772 584	510 941	529 351	815 148	1 067 319	1 293 511	1 060 903		spadek	793 866				
43	Liechtenstein			383 337	312 180	466 547	569 067	502 581	437 823				452 185				