Urok 5

Zad 1

int century = int.Parse(Console.ReadLine());

int years = century\*100;

double days = years\*365.24;

double hours = days \* 24;

double minutes = hours \* 60;

Console.WriteLine("{0} centuries = {1} years = {2} days = {3} hours = {4} minutes",century,years,days,hours,minutes);

Zad 2

Zad 3

string pr = Console.ReadLine();

Console.WriteLine(Convert.ToInt32(pr,16));

Zad 4

int a = int.Parse(Console.ReadLine());

int b = int.Parse(Console.ReadLine());

Console.WriteLine("Before:");

Console.WriteLine("a={0}",a);

Console.WriteLine("b={0}",b);

Console.WriteLine();

int br;

br=a; a=b; b=br;

Console.WriteLine("After:");

Console.WriteLine("a={0}",a);

Console.WriteLine("b={0}",b);

Zad 5

int chislo = int.Parse(Console.ReadLine());

string chislo16 = Convert.ToString(chislo,16);

Console.WriteLine(chislo16.ToUpper());

string chislo2 = Convert.ToString(chislo,2);

Console.WriteLine(chislo2.ToUpper());

Zad 6

int n = int.Parse(Console.ReadLine());

int br=0;

int brChislo=0;

for (int i = 1; i<=n\*2; i++){

int a = int.Parse(Console.ReadLine());

if (i%2==1){

brChislo = a;}

else {

br = brChislo % a + br;}

}

Console.WriteLine(br);

Urok 6

Zad 2

double r = double.Parse(Console.ReadLine());

Console.WriteLine("{0:f12}", r\*r\*3.1415926535897932384626433832795028841971693993751058209);

Zad 3

int n = int.Parse(Console.ReadLine());

decimal br=0;

for (int i = 0; i<n; i++){

decimal a = decimal.Parse(Console.ReadLine());

br = br + a;

}

Console.WriteLine(br);

Zad 4

double a = double.Parse(Console.ReadLine());

double b = double.Parse(Console.ReadLine());

Console.WriteLine(2\*(a+b));

Console.WriteLine(a\*b);

Console.WriteLine(Math.Sqrt(a\*a+b\*b));

Zad 5

float metri = int.Parse(Console.ReadLine());

float chas = int.Parse(Console.ReadLine());

float min = int.Parse(Console.ReadLine());

float sek = int.Parse(Console.ReadLine());

float mile = metri\*1609;

float km = metri/1000;

Console.WriteLine(metri/sek);

Console.WriteLine(km/chas);

Console.WriteLine(mile/chas);

Urok 7

Zad 1

int hora = int.Parse(Console.ReadLine());

int cap = int.Parse(Console.ReadLine());

int br = 0;

br = hora/cap + br;

if (hora%cap != 0){

br++;}

Console.WriteLine(br);

Zad 2

int n = int.Parse(Console.ReadLine());

for (int i=1; i<=n; i++)

{

if (i%10+i/10+i/100 == 5 || i%10+i/10+i/100 == 7 || i%10+i/10+i/100 == 11){

Console.WriteLine("{0} -> True",i);}

else {Console.WriteLine("{0} -> False", i);}

}

Zad 3

string n = Console.ReadLine();

bool n1 = Convert.ToBoolean(n);

if (n1 == true){

Console.WriteLine("Yes");}

else if (n1 == false){

Console.WriteLine("No");}

Zad 4

int n = int.Parse(Console.ReadLine());

for (int i1 = 0; i1<=n-1; i1++)

{

for (int i2 = 0; i2<=n-1; i2++)

{

for (int i3 = 0; i3<=n-1; i3++)

{

char letter1 = (char)('a'+ i1);

Console.Write(letter1);

char letter2 = (char)('a'+ i2);

Console.Write(letter2);

char letter3 = (char)('a'+ i3);

Console.WriteLine(letter3);

}

}

}

Urok 8

Zad 1

string firstName = Console.ReadLine();

string lastName = Console.ReadLine();

int age = int.Parse(Console.ReadLine());

Console.WriteLine("Hello, {0} {1}. You are {2} years old.",firstName, lastName, age);

Zad 4

char a1 = char.Parse(Console.ReadLine());

char a2 = char.Parse(Console.ReadLine());

char a3 = char.Parse(Console.ReadLine());

Console.WriteLine(a3+""+a2+""+a1);

Zad 5

string firstName = Console.ReadLine();

string lastName = Console.ReadLine();

byte age = byte.Parse(Console.ReadLine());

char gender = char.Parse(Console.ReadLine());

long id = long.Parse(Console.ReadLine());

long uniqueNumber = long.Parse(Console.ReadLine());

Console.WriteLine("First name: {0}",firstName);

Console.WriteLine("Last name: {0}",lastName);

Console.WriteLine("Age: {0}",age);

Console.WriteLine("Gender: {0}",gender);

Console.WriteLine("Personal ID: {0}",id);

Console.WriteLine("Unique Employee number: {0}",uniqueNumber);

Допълнителни задачи

Zad 1

string type = Console.ReadLine();

switch (type){

case "int":

Console.WriteLine(int.MaxValue);

Console.WriteLine(int.MinValue);

break;

case "uint":

Console.WriteLine(uint.MaxValue);

Console.WriteLine(uint.MinValue);

break;

case "long":

Console.WriteLine(long.MaxValue);

Console.WriteLine(long.MinValue);

break;

case "byte":

Console.WriteLine(byte.MaxValue);

Console.WriteLine(byte.MinValue);

break;

case "sbyte":

Console.WriteLine(sbyte.MaxValue);

Console.WriteLine(sbyte.MinValue);

break;

}

Zad 2

double number = double.Parse(Console.ReadLine());

if (number%1==0){

Console.WriteLine("integer");}

else {Console.WriteLine("floating-point");}

zad 3

int br = 0;

int n = int.Parse(Console.ReadLine());

for (int i = 0; i<n; i++){

int litre = int.Parse(Console.ReadLine());

if (br+litre<=250){

br=br+litre;

}

else {Console.WriteLine("Insufficient capacity!");}

}

Console.WriteLine(br);

Zad 4

string mqrka = Console.ReadLine();

double stoinost = double.Parse(Console.ReadLine());

switch (mqrka){

case "miles":

Console.WriteLine("{0} miles = {1:f2} kilometers",stoinost, stoinost\*1.6);

break;

case "inches":

Console.WriteLine("{0} inches = {1:f2} centimeters", stoinost, stoinost\*2.54);

break;

case "feet":

Console.WriteLine("{0} feet = {1:f2} centimeters", stoinost, stoinost\*30);

break;

case "yards":

Console.WriteLine("{0} inches = {1:f2} meters", stoinost, stoinost\*0.91);

break;

case "gallons":

Console.WriteLine("{0} gallons = {1:f2} litres", stoinost, stoinost\*3.8);

break;

}

Zad 5

decimal n = decimal.Parse(Console.ReadLine());

if (n%1 !=0){ Console.WriteLine("Rainy");}

else if (n<=sbyte.MaxValue && n>=sbyte.MinValue){

Console.WriteLine("Sunny");}

else if (n<=int.MaxValue && n>=int.MinValue){

Console.WriteLine("Cloudy");}

else if (n<=long.MaxValue && n>=long.MinValue){

Console.WriteLine("Windy");}

Zad 6

string type = Console.ReadLine();

decimal br = 9223372036854775808;

decimal br1 = 0;

int num = int.Parse(Console.ReadLine());

if (type == "sbyte"){

for (int i = 0; i < num; i++){

decimal a = decimal.Parse(Console.ReadLine());

if (Math.Abs(sbyte.MaxValue-a)<br){

br=Math.Abs(sbyte.MaxValue-a);

br1=a;}

}

}

else if (type == "int"){

for (int i = 0; i < num; i++){

decimal a = decimal.Parse(Console.ReadLine());

if (Math.Abs(int.MaxValue-a)<br){

br=Math.Abs(int.MaxValue-a);

br1=a;}

}

}

else if (type == "long"){

for (int i = 0; i < num; i++){

decimal a = decimal.Parse(Console.ReadLine());

if (Math.Abs(long.MaxValue-a)<br){

br=Math.Abs(long.MaxValue-a);

br1=a;}

}

}

Console.WriteLine(br1);

Zad 7

string type = Console.ReadLine();

long br = 9223372036854775807;

long br1 = 0;

int num = int.Parse(Console.ReadLine());

if (type == "sbyte"){

for (int i = 0; i < num; i++){

long a = long.Parse(Console.ReadLine());

if (Math.Abs(sbyte.MaxValue-a)<br){

br=Math.Abs(sbyte.MaxValue-a);

br1=a;}

}

}

else if (type == "int"){

for (int i = 0; i < num; i++){

long a = long.Parse(Console.ReadLine());

if (Math.Abs(int.MaxValue-a)<br){

br=Math.Abs(int.MaxValue-a);

br1=a;}

}

}

else if (type == "long"){

for (int i = 0; i < num; i++){

long a = long.Parse(Console.ReadLine());

if (Math.Abs(long.MaxValue-a)<br){

br=Math.Abs(long.MaxValue-a);

br1=a;}

}

}

if (Math.Abs(sbyte.MinValue-br1)<Math.Abs(sbyte.MaxValue-br1)){

double prisuda = Math.Ceiling(br1\*1.0/sbyte.MinValue);

if (prisuda == 1){

Console.WriteLine("Prisoner with id {0} is sentenced to {1} year",br1,prisuda);}

else {Console.WriteLine("Prisoner with id {0} is sentenced to {1} years",br1,prisuda);}

}

else {

double prisuda = Math.Ceiling(br1\*1.0/sbyte.MaxValue);

if (prisuda == 1){

Console.WriteLine("Prisoner with id {0} is sentenced to {1} year",br1,prisuda);}

else {Console.WriteLine("Prisoner with id {0} is sentenced to {1} years",br1,prisuda);}}

zad 10

int num = int.Parse(Console.ReadLine());

int br = 0;

for (int i=0; i<num; i++){

char a = char.Parse(Console.ReadLine());

if (a == 'A'){

br=br+65;}

if (a == 'B'){

br=br+66;}

if (a == 'C'){

br=br+67;}

if (a == 'D'){

br=br+68;}

if (a == 'E'){

br=br+69;}

if (a == 'F'){

br=br+70;}

if (a == 'G'){

br=br+71;}

if (a == 'H'){

br=br+72;}

if (a == 'I'){

br=br+73;}

if (a == 'J'){

br=br+74;}

if (a == 'K'){

br=br+75;}

if (a == 'L'){

br=br+76;}

if (a == 'M'){

br=br+77;}

if (a == 'N'){

br=br+78;}

if (a == 'O'){

br=br+79;}

if (a == 'P'){

br=br+80;}

if (a == 'Q'){

br=br+81;}

if (a == 'R'){

br=br+82;}

if (a == 'S'){

br=br+83;}

if (a == 'T'){

br=br+84;}

if (a == 'U'){

br=br+85;}

if (a == 'V'){

br=br+86;}

if (a == 'W'){

br=br+87;}

if (a == 'X'){

br=br+88;}

if (a == 'Y'){

br=br+89;}

if (a == 'Z'){

br=br+90;}

if (a == 'a'){

br=br+97;}

if (a == 'b'){

br=br+98;}

if (a == 'c'){

br=br+99;}

if (a == 'd'){

br=br+100;}

if (a == 'e'){

br=br+101;}

if (a == 'f'){

br=br+102;}

if (a == 'g'){

br=br+103;}

if (a == 'h'){

br=br+104;}

if (a == 'i'){

br=br+105;}

if (a == 'j'){

br=br+106;}

if (a == 'k'){

br=br+107;}

if (a == 'l'){

br=br+108;}

if (a == 'm'){

br=br+109;}

if (a == 'n'){

br=br+110;}

if (a == 'o'){

br=br+111;}

if (a == 'p'){

br=br+112;}

if (a == 'q'){

br=br+113;}

if (a == 'r'){

br=br+114;}

if (a == 's'){

br=br+115;}

if (a == 't'){

br=br+116;}

if (a == 'u'){

br=br+117;}

if (a == 'v'){

br=br+118;}

if (a == 'w'){

br=br+119;}

if (a == 'x'){

br=br+120;}

if (a == 'y'){

br=br+121;}

if (a == 'z'){

br=br+122;}

}

Console.WriteLine("The sum equals: {0}",br);

Zad 13

int num = int.Parse(Console.ReadLine());

int broi = int.Parse(Console.ReadLine());

char br=' ';

for (int i = 0; i<broi; i++){

char a = char.Parse(Console.ReadLine());

br = (char)(a+num);

}

Console.WriteLine(br);

Zad 16

var symbol = Console.ReadLine();

if (symbol=="A" || symbol == "a" || symbol=="E" || symbol == "e" || symbol=="I" || symbol == "i" || symbol=="U" || symbol == "u" || symbol=="O" || symbol == "o"){

Console.WriteLine("vowel");}

else if (symbol=="1" || symbol=="2" || symbol=="3" || symbol=="4" || symbol=="5" || symbol=="6" || symbol=="7" || symbol=="8" || symbol=="9"){

Console.WriteLine("digit");

}

else {Console.WriteLine("other");}

zad 19

int a = int.Parse(Console.ReadLine());

int b = int.Parse(Console.ReadLine());

for (int i = a; i<=b; i++){

if (i==33){

Console.Write("! ");}

if (i==34){

Console.Write("\" ");}

if (i==35){

Console.Write("# ");}

if (i==36){

Console.Write("$ ");}

if (i==37){

Console.Write("% ");}

if (i==38){

Console.Write("& ");}

if (i==39){

Console.Write("\' ");}

if (i==40){

Console.Write("( ");}

if (i==41){

Console.Write(") ");}

if (i==42){

Console.Write("\* ");}

if (i==43){

Console.Write("+ ");}

if (i==44){

Console.Write(", ");}

if (i==45){

Console.Write("- ");}

if (i==46){

Console.Write(". ");}

if (i==47){

Console.Write("/ ");}

if (i==48){

Console.Write("0 ");}

if (i==49){

Console.Write("1 ");}

if (i==50){

Console.Write("2 ");}

if (i==51){

Console.Write("3 ");}

if (i==52){

Console.Write("4 ");}

if (i==53){

Console.Write("5 ");}

if (i==54){

Console.Write("6 ");}

if (i==55){

Console.Write("7 ");}

if (i==56){

Console.Write("8 ");}

if (i==57){

Console.Write("9 ");}

if (i==58){

Console.Write(": ");}

if (i==59){

Console.Write("; ");}

if (i==60){

Console.Write("< ");}

if (i==61){

Console.Write("= ");}

if (i==62){

Console.Write("> ");}

if (i==63){

Console.Write("? ");}

if (i==64){

Console.Write("@ ");}

if (i==65){

Console.Write("A ");}

if (i==66){

Console.Write("B ");}

if (i==67){

Console.Write("C ");}

if (i==68){

Console.Write("D ");}

if (i==69){

Console.Write("E ");}

if (i==70){

Console.Write("F ");}

if (i==71){

Console.Write("G ");}

if (i==72){

Console.Write("H ");}

if (i==73){

Console.Write("I ");}

if (i==74){

Console.Write("J ");}

if (i==75){

Console.Write("K ");}

if (i==76){

Console.Write("L ");}

if (i==77){

Console.Write("M ");}

if (i==78){

Console.Write("N ");}

if (i==79){

Console.Write("O ");}

if (i==80){

Console.Write("P ");}

if (i==81){

Console.Write("Q ");}

if (i==82){

Console.Write("R ");}

if (i==83){

Console.Write("S ");}

if (i==84){

Console.Write("T ");}

if (i==85){

Console.Write("U ");}

if (i==86){

Console.Write("V ");}

if (i==87){

Console.Write("W ");}

if (i==88){

Console.Write("X ");}

if (i==89){

Console.Write("Y ");}

if (i==90){

Console.Write("Z ");}

if (i==91){

Console.Write("[ ");}

if (i==92){

Console.Write("\\ ");}

if (i==93){

Console.Write("] ");}

if (i==94){

Console.Write("^ ");}

if (i==95){

Console.Write("\_ ");}

if (i==96){

Console.Write("` ");}

if (i==97){

Console.Write("a ");}

if (i==98){

Console.Write("b ");}

if (i==99){

Console.Write("c ");}

if (i==100){

Console.Write("d ");}

if (i==101){

Console.Write("e ");}

if (i==102){

Console.Write("f ");}

if (i==103){

Console.Write("g ");}

if (i==104){

Console.Write("h ");}

if (i==105){

Console.Write("i ");}

if (i==106){

Console.Write("j ");}

if (i==107){

Console.Write("k ");}

if (i==108){

Console.Write("l ");}

if (i==109){

Console.Write("m ");}

if (i==110){

Console.Write("n ");}

if (i==111){

Console.Write("o ");}

if (i==112){

Console.Write("p ");}

if (i==113){

Console.Write("q ");}

if (i==114){

Console.Write("r ");}

if (i==115){

Console.Write("s ");}

if (i==116){

Console.Write("t ");}

if (i==117){

Console.Write("u ");}

if (i==118){

Console.Write("v ");}

if (i==119){

Console.Write("w ");}

if (i==120){

Console.Write("x ");}

if (i==121){

Console.Write("y ");}

if (i==122){

Console.Write("z ");}

if (i==123){

Console.Write("{ ");}

if (i==124){

Console.Write("| ");}

if (i==125){

Console.Write("} ");}

if (i==126){

Console.Write("~ ");}

}