1.    Write an **if**-statement that takes two integer variables and **exchanges** their values if the first one is greater than the second one.

using System;

namespace Detyra1

{

class Program

{

static void Main(string[] args)

{

Console.Write("Enter first number: ");

int num1 = Int32.Parse(Console.ReadLine());

Console.Write("Enter second number: ");

int num2 = Int32.Parse(Console.ReadLine());

if(num1 < num2)

{

num1 = num2;

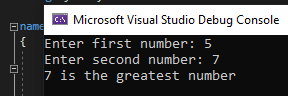
}

Console.WriteLine("{0} is the greatest number", num1);

}

}

}



2.    Write a program that shows the sign (**+** or **-**) of the product of three real numbers, without calculating it. Use a sequence of **if** operators.

using System;

namespace Detyra2

{

class Program

{

static void Main()

{

Console.Write("Enter first number: ");

int a = Int32.Parse(Console.ReadLine());

Console.Write("Enter second number: ");

int b = Int32.Parse(Console.ReadLine());

Console.Write("Enter third number: ");

int c = Int32.Parse(Console.ReadLine());

if (a < 0 && b < 0 && c < 0) Console.WriteLine("-");

else if (a >= 0 && b >= 0 && c >= 0) Console.WriteLine("+");

else if (a < 0 && b < 0 && c >= 0) Console.WriteLine("+");

else if (a < 0 && b >= 0 && c < 0) Console.WriteLine("+");

else if (a >= 0 && b < 0 && c < 0) Console.WriteLine("+");

else if (a < 0 && b >= 0 && c >= 0) Console.WriteLine("-");

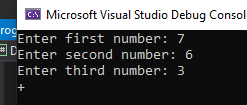
else if (a >= 0 && b < 0 && c >= 0) Console.WriteLine("-");

else if (a >= 0 && b >= 0 && c < 0) Console.WriteLine("-");

}

}

}



3.    Write a program that finds the **biggest of three integers**, using nested **if** statements.

using System;

namespace Detyra3

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter the first number: ");

int num1 = Int32.Parse(Console.ReadLine());

Console.WriteLine("Enter the second number: ");

int num2 = Int32.Parse(Console.ReadLine());

Console.WriteLine("Enter the third number: ");

int num3 = Int32.Parse(Console.ReadLine());

if (num1 > num2)

if (num1 > num3) Console.WriteLine("Numri i pare eshte me i madh");

else if (num1 < num3) Console.WriteLine("Numri i tret eshte me i madh");

else Console.WriteLine("numri i pare dhe i tret jane me te medhenjte");

else if (num1 < num2)

{

if (num2 > num3) Console.WriteLine("Numri i dyte eshte me i madhi");

else if (num2 < num3) Console.WriteLine("Numri i tret eshte me i madhi");

else Console.WriteLine("Numri i dyte dhe numri i tret jane me te

medhenjte");

}

else if (num1 == num2)

{

if (num1 == num3) Console.WriteLine("Te gjithe jane te barabarte");

else if (num1 < num3) Console.WriteLine("Numri i tret eshte me i madhi");

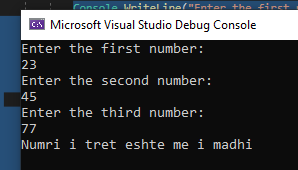
else Console.WriteLine("numri i pare dhe numri i dyte jane me te

medhenjte");

} }

}

}



4.    **Sort 3 real numbers** in descending order. Use nested **if** statements.

using System;

namespace Detyra4

{

class Program

{

static void Main()

{

Console.Write("Enter first number: ");

int num1 = Int32.Parse(Console.ReadLine());

Console.Write("Enter second number: ");

int num2 = Int32.Parse(Console.ReadLine());

Console.Write("Enter third number: ");

int num3 = Int32.Parse(Console.ReadLine());

if(num1 > num2 && num1 > num3)

{

if (num2 > num3)

{

Console.WriteLine("Here are the order numbers: {0} {1} {2}",

num1, num2, num3);

}

else

{

Console.WriteLine("Here are the order numbers: {0} {1} {2}",

num1, num3, num2);

}

}

else if(num2 > num1 && num2 > num3)

{

if(num1 > num3)

{

Console.WriteLine("Here are the order numbers: {0} {1} {2}",

num2, num1, num3);

}

else

{

Console.WriteLine("Here are the order numbers: {0} {1} {2}",

num2, num3, num1);

}

}

else if (num3 > num1 && num3 > num2)

{

if(num1 > num2)

{

Console.WriteLine("Here are the order numbers: {0} {1} {2}",

num3, num1, num2);

}

else

{

Console.WriteLine("Here are the order numbers: {0} {1} {2}",

num3, num2, num1);

}

}else if (num1 == num2 && num1 == num3)

{

if(num2 == num3)

{

Console.WriteLine("Here are the order number: {0} {1} {2}",

num1, num2, num3);

}

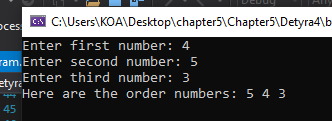
}

Console.ReadKey();

}

}

}



5.    Write a program that asks for a digit (0-9), and depending on the input, **shows the digit as a word** (in English). Use a **switch** statement.

using System;

namespace Detyra5

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter a number from 0-9: ");

int num = Int32.Parse(Console.ReadLine());

switch (num)

{

case 0:

Console.WriteLine("zero");

break;

case 1:

Console.WriteLine("one");

break;

case 2:

Console.WriteLine("two");

break;

case 3:

Console.WriteLine("three");

break;

case 4:

Console.WriteLine("four");

break;

case 5:

Console.WriteLine("five");

break;

case 6:

Console.WriteLine("six");

break;

case 7:

Console.WriteLine("seven");

break;

case 8:

Console.WriteLine("eight");

break;

case 9:

Console.WriteLine("nine");

break;

default:

Console.WriteLine("Wrong inout");

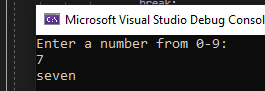
break;

}

}

}

}



6.    Write a program that gets the coefficients ***a***, ***b*** and ***c*** of a quadratic equation: ***a*x2** **+** ***b*x** **+** ***c***, calculates and prints its real roots (if they exist). Quadratic equations may have 0, 1 or 2 real roots.

using System;

namespace Detyra6

{

class Program

{

public static void Main()

{

int a, b, c;

double d, x1, x2;

Console.Write("\n\n");

Console.Write("Calculate root of Quadratic Equation :\n");

Console.Write("----------------------------------------");

Console.Write("\n\n");

Console.Write("Input the value of a : ");

a = Convert.ToInt32(Console.ReadLine());

Console.Write("Input the value of b : ");

b = Convert.ToInt32(Console.ReadLine());

Console.Write("Input the value of c : ");

c = Convert.ToInt32(Console.ReadLine());

d = b \* b - 4 \* a \* c;

if (d == 0)

{

Console.Write("Both roots are equal.\n");

x1 = -b / (2.0 \* a);

x2 = x1;

Console.Write("First Root Root1= {0}\n", x1);

Console.Write("Second Root Root2= {0}\n", x2);

}

else if (d > 0)

{

Console.Write("Both roots are real and diff-2\n");

x1 = (-b + Math.Sqrt(d)) / (2 \* a);

x2 = (-b - Math.Sqrt(d)) / (2 \* a);

Console.Write("First Root Root1= {0}\n", x1);

Console.Write("Second Root root2= {0}\n", x2);

}

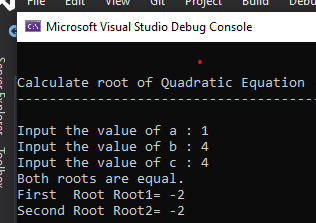
else

Console.Write("Root are imaginary");

}

}

}



7.    Write a program that finds the **greatest of given 5 numbers**.

using System;

namespace detyra7

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Declare five different numbers to see which is the greatest!!!");

Console.Write("\nDeclare number 1: ");

int num1 = Int32.Parse(Console.ReadLine());

Console.Write("\nDeclare number 2: ");

int num2 = Int32.Parse(Console.ReadLine());

Console.Write("\nDeclare number 3: ");

int num3 = Int32.Parse(Console.ReadLine());

Console.Write("\nDeclare number 4: ");

int num4 = Int32.Parse(Console.ReadLine());

Console.Write("\nDeclare number 5: ");

int num5 = Int32.Parse(Console.ReadLine());

if(num1 < num2)

{

num1 = num2;

}

if (num1 < num3)

{

num1 = num3;

}

if(num1 < num4)

{

num1 = num4;

}

if(num1 < num5)

{

num1 = num5;

}

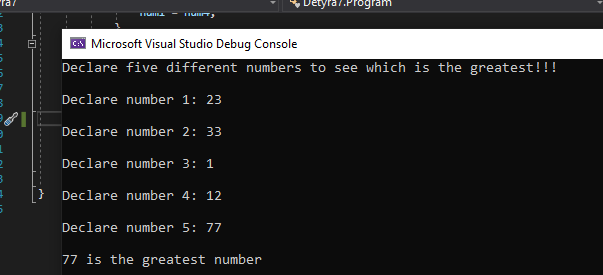
Console.WriteLine("\n{0} is the greatest number", num1);

Console.ReadKey();

}

}

}



8.    Write a program that, depending on the user’s choice, inputs **int**, **double** or **string** variable. If the variable is **int** or **double**, the program increases it by 1. If the variable is a **string**, the program appends "**\***" at the end. Print the result at the console. Use **switch** statement.

using System;

namespace Detyra8

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter variable type (0 - int, 1 - double, 2 - string): ");

int numri = Int32.Parse(Console.ReadLine());

switch (numri)

{

case 0:

{

Console.WriteLine("Enter int variable: ");

numri = Int32.Parse(Console.ReadLine());

numri++;

Console.WriteLine(numri);

break;

}

case 1:

{

Console.WriteLine("Enter double variable: ");

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

doubleVar++;

Console.WriteLine(doubleVar);

break;

}

case 2:

{

Console.WriteLine("Enter string variable: ");

string stringVar = Console.ReadLine();

stringVar = stringVar + "\*";

Console.WriteLine(stringVar);

break;

}

default: Console.WriteLine("Wrong input"); break;

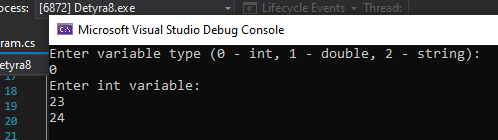
}

Console.ReadKey();

}

}

}



9.    We are given 5 integer numbers. Write a program that finds those **subsets whose sum is 0**. Examples:

-     If we are given the numbers {3, -2, 1, 1, 8}, the sum of -2, 1 and 1 is 0.

-     If we are given the numbers {3, 1, -7, 35, 22}, there are no subsets with sum 0.

using System;

namespace Detyra9

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Enter Five different numbers.");

Console.Write("Enter Number 1: ");

int num1 = int.Parse(Console.ReadLine());

Console.Write("Enter Number 2: ");

int num2 = int.Parse(Console.ReadLine());

Console.Write("Enter Number 3: ");

int num3 = int.Parse(Console.ReadLine());

Console.Write("Enter Number 4: ");

int num4 = int.Parse(Console.ReadLine());

Console.Write("Enter Number 5: ");

int num5 = int.Parse(Console.ReadLine());

if((num1 + num2) == 0)

{

Console.WriteLine($"the sum of {num1} + {num2} is 0");

}

if ((num1 + num3) == 0)

{

Console.WriteLine($"the sum of {num1} + {num3} is 0");

}

if ((num1 + num4) == 0)

{

Console.WriteLine($"the sum of {num1} + {num4} is 0");

}

if ((num1 + num5) == 0)

{

Console.WriteLine($"the sum of {num1} + {num5} is 0");

}

if ((num2 + num3) == 0)

{

Console.WriteLine($"the sum of {num2} + {num3} is 0");

}

if ((num2 + num4) == 0)

{

Console.WriteLine($"the sum of {num2} + {num4} is 0");

}

if ((num2 + num5) == 0)

{

Console.WriteLine($"the sum of {num2} + {num5} is 0");

}

if ((num3 + num4) == 0)

{

Console.WriteLine($"the sum of {num3} + {num4} is 0");

}

if ((num3 + num5) == 0)

{

Console.WriteLine($"the sum of {num3} + {num5} is 0");

}

if ((num4 + num5) == 0)

{

Console.WriteLine($"the sum of {num4} + {num5} is 0");

}

if((num1 + num2 + num3) == 0)

{

Console.WriteLine($"The sume of {num1} + {num2} + {num3} is 0");

}

if ((num1 + num2 + num4) == 0)

{

Console.WriteLine($"The sume of {num1} + {num2} + {num4} is 0");

}

if ((num1 + num2 + num5) == 0)

{

Console.WriteLine($"The sume of {num1} + {num2} + {num5} is 0");

}

if ((num2 + num3 + num4) == 0)

{

Console.WriteLine($"The sume of {num2} + {num3} + {num4} is 0");

}

if ((num2 + num3 + num5) == 0)

{

Console.WriteLine($"The sume of {num2} + {num3} + {num5} is 0");

}

if ((num3 + num4 + num5) == 0)

{

Console.WriteLine($"The sume of {num3} + {num4} + {num5} is 0");

}

if ((num1 + num2 + num3 + num4) == 0)

{

Console.WriteLine($"The sum of {num1} + {num2} + {num3} + {num4} is 0");

}

if ((num1 + num2 + num3 + num5) == 0)

{

Console.WriteLine($"The sum of {num1} + {num2} + {num3} + {num4} is 0");

}

if ((num1 + num2 + num4 + num5) == 0)

{

Console.WriteLine($"The sum of {num1} + {num2} + {num4} + {num5} is 0");

}

if ((num1 + num3 + num4 + num5) == 0)

{

Console.WriteLine($"The sum of {num1} + {num3} + {num4} + {num5} is 0");

}

if ((num2 + num3 + num4 + num5) == 0)

{

Console.WriteLine($"The sum of {num2} + {num3} + {num4} + {num5} is 0");

}

if ((num1 + num2 + num3 + num4 + num5) == 0)

{

Console.WriteLine($"The sum of {num1} + {num2} + {num3} + {num4} + {num5} is 0");

}

else

{

Console.WriteLine("No sum is equal to 0");

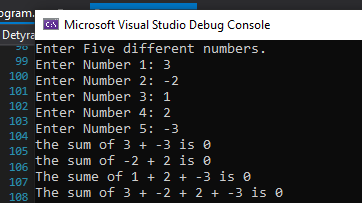
}

Console.ReadKey();

}

}

}



10.   Write a program that applies **bonus points** to given scores in the range [1…9] by the following rules:

-     If the score is between 1 and 3, the program multiplies it by 10.

-     If the score is between 4 and 6, the program multiplies it by 100.

-     If the score is between 7 and 9, the program multiplies it by 1000.

-     If the score is 0 or more than 9, the program prints an error message.

using System;

namespace Detyra10

{

class Program

{

static void Main(string[] args)

{

Console.WriteLine("From 0-9 how much do u love Kosovo? ");

Console.Write("Enter your number: ");

int num1 = int.Parse(Console.ReadLine());

switch (num1)

{

case 1:

{

num1 \*= 10;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 2:

{

num1 \*= 10;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 3:

{

num1 \*= 10;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 4:

{

num1 \*= 100;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 5:

{

num1 \*= 100;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 6:

{

num1 \*= 100;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 7:

{

num1 \*= 1000;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 8:

{

num1 \*= 1000;

Console.WriteLine("Your score is {0}", num1);

break;

}

case 9:

{

num1 \*= 1000;

Console.WriteLine("Your score is {0}", num1);

break;

}

default: Console.WriteLine("Wrong input"); break;

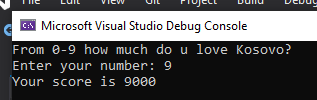
}

Console.ReadKey();

}

}

}



11.   \* Write a program that **converts a number in the range [0…999] to words**, corresponding to the English pronunciation. Examples:

-     0 --> "Zero"

-     12 --> "Twelve"

-     98 --> "Ninety eight"

-     273 --> "Two hundred seventy three"

-     400 --> "Four hundred"

-     501 --> "Five hundred and one"

-     711 --> "Seven hundred and eleven"

using System;

namespace Detyra11

{

class Program

{

static void Main(string[] args)

{

Console.Write("Enter a number between 0 and 999: ");

short num = Convert.ToInt16(Console.ReadLine());

byte hundreds = (byte)(num / 100 | 0);

byte tensAndOnes;

if (num > 99) tensAndOnes = (byte)(num % 100);

else tensAndOnes = (byte)(num \* 1);

byte ones = (byte)(num % 10);

switch (hundreds)

{

case 1: Console.Write("One hundred "); break;

case 2: Console.Write("Two hundred "); break;

case 3: Console.Write("Three hundred "); break;

case 4: Console.Write("Four hundred "); break;

case 5: Console.Write("Five hundred "); break;

case 6: Console.Write("Six hundred "); break;

case 7: Console.Write("Seven hundred "); break;

case 8: Console.Write("Eight hundred "); break;

case 9: Console.Write("Nine hundred "); break;

}

if (hundreds >= 1 && tensAndOnes >= 1) Console.Write("and ");

if (tensAndOnes >= 20 && tensAndOnes < 30) Console.Write("Twenty");

else if (tensAndOnes >= 30 && tensAndOnes < 40) Console.Write("Thirty");

else if (tensAndOnes >= 40 && tensAndOnes < 50) Console.Write("Fourty");

else if (tensAndOnes >= 50 && tensAndOnes < 60) Console.Write("Fifty");

else if (tensAndOnes >= 60 && tensAndOnes < 70) Console.Write("Sixty");

else if (tensAndOnes >= 70 && tensAndOnes < 80) Console.Write("Seventy");

else if (tensAndOnes >= 80 && tensAndOnes < 90) Console.Write("Eighty");

else if (tensAndOnes >= 90 && tensAndOnes < 100) Console.Write("Ninety");

switch (tensAndOnes)

{

case 1: Console.Write("One"); break;

case 2: Console.Write("Two"); break;

case 3: Console.Write("Three"); break;

case 4: Console.Write("Four"); break;

case 5: Console.Write("Five"); break;

case 6: Console.Write("Six"); break;

case 7: Console.Write("Seven"); break;

case 8: Console.Write("Eight"); break;

case 9: Console.Write("Nine"); break;

case 10: Console.Write("Ten"); break;

case 11: Console.Write("Eleven"); break;

case 12: Console.Write("Twelve"); break;

case 13: Console.Write("Thirteen"); break;

case 14: Console.Write("Fourteen"); break;

case 15: Console.Write("Fifteen"); break;

case 16: Console.Write("Sixteen"); break;

case 17: Console.Write("Seventeen"); break;

case 18: Console.Write("Eighteen"); break;

case 19: Console.Write("Nineteen"); break;

}

if (tensAndOnes > 20)

{

switch (ones)

{

case 1: Console.Write("-one"); break;

case 2: Console.Write("-two"); break;

case 3: Console.Write("-three"); break;

case 4: Console.Write("-four"); break;

case 5: Console.Write("-five"); break;

case 6: Console.Write("-six"); break;

case 7: Console.Write("-seven"); break;

case 8: Console.Write("-eight"); break;

case 9: Console.Write("-nine"); break;

}

}

if (num == 0) Console.Write("Zero");

Console.ReadLine();

}

}

}

