using System;

namespace Lab\_1\_level\_1

{

class program

{

static double factorial(double a)

{

if (a==0) return 1;

return a\*factorial(a-1);

}

static void Main()

{

#region 1\_1

int s=0;

for (int i=2; i<=35; i=i+3)

{

s=s+i;

}

Console.WriteLine("1\_1: {0}",s);

#endregion

#region 1\_2

double ss=1;

for (double j=2; j<=10; j++)

{

ss=ss+(1/j);

}

Console.WriteLine("1\_2: {0}",ss);

#endregion

#region 1\_3

ss=0;

for (double j=2; j<=112; j=j+2)

{

ss=ss+(j/(j+1));

}

Console.WriteLine("1\_3: {0}",ss);

#endregion

#region 1\_4

ss=0;

double x=Math.PI\*2;

for (double j=1; j<=9; j++)

{

ss=ss+Math.Cos(x\*j)/Math.Pow(x,j-1);

}

Console.WriteLine("1\_4: {0}",ss);

#endregion

#region 1\_5

ss=0;

const double p=1,h=1;

for (double j=0; j<=9; j++)

{

ss=ss+Math.Pow(p+j\*h,2);

}

Console.WriteLine("1\_5: {0}",ss);

#endregion

#region 1\_6

Console.WriteLine("1\_6:");

Console.WriteLine(" x y ");

for (double j=-4;j<=4;j+=0.5)

{

double y=0.5\*Math.Pow(j,2)-7\*j;

Console.WriteLine("{0,7} {1,7}",j,y);

}

#endregion

#region 1\_7

ss=1;

for (double j=2;j<=6;j++)

{

ss=ss\*j;

}

Console.WriteLine("1\_7: {0}",ss);

#endregion

#region 1\_8

ss=0;

for (double j=1;j<=6;j++)

{

ss+=factorial(j);

}

Console.WriteLine("1\_8: {0}",ss);

#endregion

#region 1\_9

ss=0;

for (double j=1;j<=6;j++)

{

ss+=Math.Pow(-5,j)/factorial(j);

}

Console.WriteLine("1\_9: {0}",ss);

#endregion

#region 1\_10

int otv=1;

for ( int i=1;i<=7;i++)

{

otv\*=3;

}

Console.WriteLine("1\_10: {0}",otv);

#endregion

#region 1\_11

Console.Write("1\_11\_a: ");

for (int i=1;i<=6;i++)

{

Console.Write("{0} ",i);

}

Console.WriteLine();

Console.Write("1\_11\_b: ");

for (int i=1;i<=6;i++)

{

Console.Write("5 ");

}

#endregion

#region 1\_12

Console.WriteLine();

ss=0;

x=1;

for (double j=0;j<=10;j++)

{

ss+=1/Math.Pow(x,j);

}

Console.WriteLine("1\_12: {0}",ss);

#endregion

}

}

}