using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace homework1

{

class Program

{

static void Main(string[] args)

{

int grade;

double mark;

mark = Convert.ToDouble(Console.ReadLine());

grade = Convert.ToInt32(Math.Truncate(mark / 10));

switch (grade)

{

case 0: case 1: case 2: case 3: case 4: Console.WriteLine("Grade: N."); break;

case 5: Console.WriteLine("Grade: P."); break;

case 6: Console.WriteLine("Grade: C."); break;

case 7: Console.WriteLine("Grade: D."); break;

case 8: case 10: Console.WriteLine("Grade: HD."); break;

default: Console.WriteLine("Please check... Mark should be in 0-100 ONLY"); break;

}

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace homework2

{

class Program

{

static void Main(string[] args)

{

const double d\_pi = 3.1416;

double d\_x, d\_y;

Console.Write("Please input independent variable X >");

d\_x = Convert.ToDouble(Console.ReadLine());

if (d\_x == 0) d\_y = 1;

else d\_y = Math.Sin(d\_x / 2 / d\_pi) + Math.Sqrt(d\_x \* d\_x + 1);

Console.WriteLine("Y =" + d\_y);

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace homework3

{

class Program

{

static void Main(string[] args)

{

double d\_c, d\_x, d\_y, d\_discount;

Console.Write("Please input the cost before discount >");

d\_c = Convert.ToDouble(Console.ReadLine());

d\_x = Math.Truncate(d\_c / 1000);

switch(d\_x)

{

case 0:d\_discount = 1;break;

case 1:d\_discount = 0.9;break;

case 2:d\_discount = 0.8;break;

default:d\_discount = 0.7;break;

}

d\_y = d\_c \* d\_discount;

Console.WriteLine("You should pay" + d\_y + "Yuan");

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace homework4

{

class Program

{

static void Main(string[] args)

{

int i\_num;

Console.Write("Please input a number between 1 and 7 >");

i\_num = Convert.ToInt32(Console.ReadLine());

switch(i\_num)

{

case 1: Console.WriteLine("Monday"); break;

case 2: Console.WriteLine("Tuesday"); break;

case 3: Console.WriteLine("Wednesday"); break;

case 4: Console.WriteLine("Thursday"); break;

case 5: Console.WriteLine("Friday"); break;

case 6: Console.WriteLine("Saturday"); break;

case 7: Console.WriteLine("Sunday"); break;

default: Console.WriteLine("Please input correct number"); break;

}

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace homework5

{

class Program

{

static void Main(string[] args)

{

double d\_x1, d\_x2, d\_delta, d\_a, d\_b, d\_c;

Console.Write("Please input the a function ax^2+bx+c = 0 >");

d\_a = Convert.ToDouble(Console.ReadLine());

Console.Write("Please input the b function ax^2+bx+c = 0 >");

d\_b = Convert.ToDouble(Console.ReadLine());

Console.Write("Please input the c function ax^2+bx+c = 0 >");

d\_c = Convert.ToDouble(Console.ReadLine());

Console.WriteLine("The function is " + d\_a + "x^2+" + d\_b + "x+" + d\_c + " = 0 ");

d\_delta = d\_b \* d\_b - 4 \* d\_a \* d\_c;

if (d\_a == 0)

{

d\_x1 = -d\_c / d\_b;

Console.WriteLine("This function has a solution x = " + d\_x1);

}

else if (d\_delta == 0)

{

d\_x1 = -d\_b / (2 \* d\_a);

Console.WriteLine("This function has two solutions in same, x1 = x2 = " + d\_x1);

}

else if (d\_delta > 0)

{

d\_x1 = (-d\_b - Math.Sqrt(d\_delta)) / (2 \* d\_a);

d\_x2 = (-d\_b + Math.Sqrt(d\_delta)) / (2 \* d\_a);

Console.WriteLine("This function has two solutions, x1 = " + d\_x1 + " , x2 = " + d\_x2);

}

else Console.WriteLine("This function has no solotion in real number");

}

}

}