All vowels code

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;


namespace AllVowels
{
   class Program
   {
      static void Main(string[] args)
      {
         string input = Console.ReadLine();
         int result = userprogramcode.vowels(input);
         if(result==1)
         {
            Console.WriteLine("Valid");
         }
         else
         {
            Console.WriteLine("Invalid");
         }
```

```
        }
    }
}

namespace AllVowels
{
    class userprogramcode
    {
        public static int vowels(string s)
        {
            string a = "aeiou";
            char[] c = s.ToCharArray();
            StringBuilder sb = new StringBuilder();
            foreach (char item in c)
            {
                if (item == 'a' || item == 'e' || item == 'i' || item == 'o' || item == 'u')

                    sb.Append(item);
            }


            string b = sb.ToString();
            if (a == b)
                return 1;
```

```
            else
                return -1;




        }
    }
}
```

Reverse substring

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
namespace ConsoleApplication9
{
    public class UserProgramCode
    {
        public static string reverseSubstring(string str, int start, int len)
        {
            StringBuilder sb = new StringBuilder();


            char[] ch = str.ToCharArray();
```

```
        Array.Reverse(ch);
        foreach (char item in ch)
        {
           sb.Append(item);
        }
        string s1 = sb.ToString();
        string s2 = s1.Substring(start, len);
        return s2;
      }
   }
   class Program
   {
      static void Main(string[] args)
      {
        string str = Console.ReadLine();
        int start = int.Parse(Console.ReadLine());
        int len = int.Parse(Console.ReadLine());
        string str2 = UserProgramCode.reverseSubstring(str, start, len);
        Console.WriteLine(str2);
      }
   }
}
```

Calculate VAT

```
using System;
using System.Collections.Generic;
using System.Text;


namespace testteckTest
{
   class vat
   {
      public static double vatt(char ch, double cost)
      {
         double tax = 0; if (cost < 0) tax = -1;
         else if (ch != 'M' && ch != 'V' && ch != 'C' && ch != 'E') tax = -1;
         else if (ch == 'M')


            tax = 0.09 * cost;
         else if (ch == 'V')


            tax = 0.05 * cost;
         else if (ch == 'C')


            tax = 0.12 * cost;
         else if (ch == 'E')
```

```
            tax = 0.625 * cost; return tax;


        }


    }
}


namespace testteckTest
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("INPUT PLZZ...");
            char x =Convert.ToChar( Console.ReadLine());
            int c = Convert.ToInt32(Console.ReadLine());
            //Console.WriteLine("Hello World!");
            Console.WriteLine("the tax is: " + vat.vatt(x, c));
        }
    }
}
```

Count Vowels

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace tripprob4
{
   class Program
   {
      static void Main(string[] args)
      {
         do
         {
            UserProgramCode p = new UserProgramCode();

            Console.WriteLine(" Enter string to count Vowels");

            string st = Console.ReadLine();

            int ans = p.countVowels(st);
            Console.WriteLine(ans);
```

```
            Console.ReadKey();
        } while (true);
    }
  }
}



  class UserProgramCode
  {
    public int countVowels(string st)
    {
      st.ToLower();
      int count = 0;

      if (!st.All(char.IsLetter))
      {
        //Console.WriteLine("Input contains digit/special Symbols also");
        count = -1;

        goto finish;



      }
```

```
        char[] arr = st.ToCharArray();



        foreach (var c in arr)
        {

            if (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u')
            {
                count++;
            }


        }

    finish:


        return count;


    }


}
```

Gcd_array

```
using System;
using System.Collections.Generic;
using System.Text;
using System.Linq;

namespace testteckTest
{
   class gcd_arr
   {
      public static int gcd(int[] a)
      {
         int flag = 0;
         List<int> l = new List<int>(); Array.Sort(a);

         int b = a[0];
         for (int i = 1; i <= b; i++)
         {
            flag = 0;
            for (int j = 0; j < a.Length; j++)
            {
               if (a[j] % i != 0)
               {
                  flag = 1;
```

```
                }
            }
            if (flag == 1)
            {
            }
            else
            {
                l.Add(i);
            }
        }

        Console.WriteLine(l[l.Count - 1]);
        return l[l.Count - 1];
    }

  }
}
using System;

namespace testteckTest
{
  class Program
  {
    static void Main(string[] args)
    {   int[] x = { 5, 10, 20 };
```

```
            Console.Write("the gcd-array value is = ");
            gcd_arr.gcd(x);
        }
    }
}
```

Travel Agency

```
using System;
using System.Text.RegularExpressions;
namespace code1
{
 class Program
{

static void Main(String[] args)
{
 int n, amount;
n = int.Parse(Console.ReadLine());
 String[] input1=new String[n];

for (int i = 0; i < n; i++)
{
 input1[i] = Console.ReadLine();
```

```
}
 amount=UserMainCode.getTariffAmount(input1);
 if(amount!=-1&& amount!=-2)
 Console.WriteLine("The car has taken "+n+" trips and has collected total amount of "
+ amount + "
rupees");


}
}
}
using System;
public class UserMainCode
{
 public static int getTariffAmount(string[] input1)
{
 int length = input1.Length;
 double amount = 0;
 for (int i = 0; i <length;i++)
{
 if (input1[i][2] == 'N')
{
 if (input1[i][0] == 'A')
{
 if (input1[i][1] == 'B')
 amount += 10;
```

```
 else if (input1[i][1] == 'C')
 amount += 30;
 else if (input1[i][1] == 'D')
 amount += 70;
}
 else if (input1[i][0] == 'B')
{
 if (input1[i][1] == 'A')
 amount += 10;
 else if (input1[i][1] == 'C')
 amount += 20;
 else if (input1[i][1] == 'D')
 amount += 60;
 else
{
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else if (input1[i][0] == 'C')
{
 if (input1[i][1] == 'A')
 amount += 30;
 else if (input1[i][1] == 'B')
 amount += 20;
 else if (input1[i][1] == 'D')
```

```
 amount += 40;
 else
{
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else if (input1[i][0] == 'D')
{
 if (input1[i][1] == 'A')
 amount += 70;
 else if (input1[i][1] == 'B')
 amount += 60;
 else if (input1[i][1] == 'C')
 amount += 40;
 else
{
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else
{
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else if (input1[i][2] == 'U')
```

```
{
 if (input1[i][0] == 'A')
{
 if (input1[i][1] == 'B')
 amount += 10 * 1.2;
 else if (input1[i][1] == 'C')
 amount += 30 * 1.2;
 else if (input1[i][1] == 'C')
 amount += 70 * 1.2;
}
 else if (input1[i][0] == 'B')
{
 if (input1[i][1] == 'A')
 amount += 10 * 1.2;
 else if (input1[i][1] == 'C')
 amount += 20 * 1.2;
 else if (input1[i][1] == 'D')
 amount += 60 * 1.2;
 else
{
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else if (input1[i][0] == 'C')
{
```

```
 if (input1[i][1] == 'A')
 amount += 30 * 1.2;
 else if (input1[i][1] == 'B')
 amount += 20 * 1.2;
 else if (input1[i][1] == 'D')
 amount += 40 * 1.2;
 else
 {
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else if (input1[i][0] == 'D')
{
 if (input1[i][1] == 'A')
 amount += 70 * 1.2;
 else if (input1[i][1] == 'B')
 amount += 60 * 1.2;
 else if (input1[i][1] == 'C')
 amount += 40 * 1.2;
 else
{
 Console.WriteLine("Invalid Location"); return -1;
}
}
 else
```

```
{
 Console.WriteLine("Invalid Location"); return -1;
 }
 }
 else
 { Console.WriteLine("Invalid Time of Travel"); return -2; }
}
 return (int)amount;
}
}
```