The next 'n' lines of input consists of strings that correspond to elements in the string array.

Refer business rules and sample output for output format.

Always display the tariff to be paid as an int.

Sample Input 1 :

4

ACN

DAU

ADN

DCU

Sample Output 1 :

The car has taken 4 trips and has collected total amount of 232 rupees

300

Sample Input 2 :

4

ACN

FAU

ADN

DCU

Sample Output 2 :

Invalid Location

```
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);
```

301

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

}
```

90)90.Travel Agency

A travel agency has set standard tariffs for their pick up - drop services in a particular route.The route covers A,B,C,D locations one after the other.

A. Tariff for the travel from Location A to Location B is 10 units/Km

B. Tariff for the travel from Location B to Location C is 20 units/Km

C. Tariff for the travel from Location C to Location D is 40 units/Km

Return journey service is also provided.

The starting point, destination point and the Time of travel (Normal - N, Untime - U) covered by a vehicle in a day are given as input1 in the format

{XYZ...} - here X represents Start point , Y represents the destination point and Z represents the Time of travel.

For untime travel,20% additional charges are applicable on actual tariff for that route.

Write a program to calculate the total tariff collected by that vehicle for the day given and print the output in the following format,

---

The car has taken A trips and has collected total amount of C rupees.

-Here A refers to the total number of services provided per day and C refers to the total amount from all the travels.

Business rules:

1.If start point or destination points are invalid (other than A,B,C,D), print 'Invalid Location'.

2.If Time of travel is not either N or U , print 'Invalid Time of Travel'.

Create a class named UserProgramCode that has the following static method

public static int getTariffAmount(string[] input1)

Create a class named Program that accepts the inputs and calls the static method present in the UserProgramCode.

Input and Output Format:

The first line of the input consists of an integer, n that corresponds to the number of elements in the string array.

The next 'n' lines of input consists of strings that correspond to elements in the string array.

Refer business rules and sample output for output format.

Always display the tariff to be paid as an int.

Sample Input 1 :

4

ACN

DAU

ADN

DCU

Sample Output 1 :

The car has taken 4 trips and has collected total amount of 262 rupees

---

```
        double area = 0;
        area = Math.Round((3.14*n*n),2);
        return area;

    }
```

11.Reverse Substring

Given a input string with a startIndex and length, Write a program to extract substring from right to left. Assume the last character has index 0.

Include a class UserProgramCode with a static method reverseSubstring which accepts a string and two integers. The return type is string as given in the above statement.

Create a Class Program which would be used to accept Input and call the static method present in UserProgramCode.

Input and Output Format:

Input consists of a string, and two integers – startIndex and length.

Output consists of a string as mentioned in the problem statement.

Refer sample output for formatting specifications.

Sample Input 1:

rajasthan

2

3

Sample Output 1:

hts

90)90.Travel Agency

A travel agency has set standard tariffs for their pick up - drop services in a particular route.The route covers A,B,C,D locations one after the other.

A. Tariff for the travel from Location A to Location B is 10 units/Km

B. Tariff for the travel from Location B to Location C is 20 units/Km

C. Tariff for the travel from Location C to Location D is 40 units/Km

Return journey service is also provided.

The starting point, destination point and the Time of travel (Normal - N, Untime - U) covered by a vehicle in a day are given as input1 in the format

{XYZ...} - here X represents Start point , Y represents the destination point and Z represents the Time of travel.

For untime travel,20% additional charges are applicable on actual tariff for that route.

Write a program to calculate the total tariff collected by that vehicle for the day given and print the output in the following format,

The car has taken A trips and has collected total amount of C rupees.

-Here A refers to the total number of services provided per day and C refers to the total amount from all the travels.

Business rules:

1.If start point or destination points are invalid (other than A,B,C,D), print 'Invalid Location'.

2.If Time of travel is not either N or U , print 'Invalid Time of Travel'.

Create a class named UserProgramCode that has the following static method

public static int getTariffAmount(string[] input1)

Create a class named Program that accepts the inputs and calls the static method present in the UserProgramCode.

Input and Output Format:

The first line of the input consists of an integer, n that corresponds to the number of elements in the string array.

The next 'n' lines of input consists of strings that correspond to elements in the string array.

Refer business rules and sample output for output format.

Always display the tariff to be paid as an int.

Sample Input 1 :

4

```
    }
  }
}
```

Calculate VAT

ABC stores needs a computerized solution for calculating the VAT for the billing amount. Write a code to calculate the VAT amount for the input bill amount. The VAT should be calculated in the following basis,

Type ------- VATPercentage,

Medical (M) - - - - - - - - - - 9%

Vegetables (V) and fruits - - - - - - - - - - - 5%

Clothes (C) - - - - - - - - - - - - 12%

Electronics (E) - - - - - - - - - - - - 6.25%

Business Rules :
1. The codes 'M','V','C' or 'E' only should be given as input for indicating the Medical, Vegetables and Fruits, Clothes and Electronics type of goods respectively. Any other character other than the above is given as input, it is Invalid Input.
2. Only Positive number should be given as a input for bill amount. Else it is Invalid Input.

Include a class **UserProgramCode** with a static method **calculateVAT** which accepts a character and double and returns a double which corresponds to the calculated VAT amount. If the input is invalid, the method returns -1.

Create a class **Program** which would get the input and call the static method **calculateVAT** present in the **UserProgramCode**.
If the method returns -1, print 'Invalid Input'.

Input and Output Format:

Input consists of character and double.
Character denotes a goods type and double denotes total amount.

Refer sample output for formatting specifications.

Sample Input 1 :
M
70
Sample Output 1 :
6.3

Sample Input 2 :
V
-500
Sample Output 2 :
Invalid Input

```
namespace vat
{
   class UserMainCode
```

```
        }
    }
}
```

Close

GCD – Array

Given an array of integers as input, write a program to find the Greatest Common Divisor for all the integer elements present in the input.

Greatest Common Divisor also known as the greatest common factor (gcf), of two or more integers is the largest positive integer that divides the numbers without a remainder.

Business Rule:
1. If the input array contains any value less than 1, assign -1 to the output1 variable.

Create a class named UserProgramCode that has the following static method
public static int greatestCommonDivisor(int[] input1)
Create a class named Program that accepts the inputs and calls the static method present in the UserProgramCode.

Input and Output Format:
The first line of the input consists of an integer, n that corresponds to the number of elements in the input array.
The next 'n' lines of input consist of elements in the input array.
Output is an integer.
Refer business rules and sample output for formatting specifications.

Sample Input 1 :
4
24
12
20
8

Sample Output 1 :
4

Sample Input 2 :
4
2
4
8
-6

Sample Output 2 :
-1

```
public static void user(int[] a,int n)
    {
      int flag = 0;
      List<int> l = new List<int>();
```

```
            {
                sb.Append(item1);
            }
        }

        string output= sb.ToString();
        return output;
    }
  }
}
```

Close

All Vowels

Write a Program to check if given word contains exactly five vowels and the vowels are in alphabetical order. Assume there is no repetition of any vowel in the given string and all letters are in lower case.

Include a class **UserProgramCode** with a static method **testOrderVowels** which accepts a string and returns an integer. The method returns 1 if the condition stated above is satisfied. Else the method returns -1.

Create a Class **Program** which would be used to read a String and call the static method present in **UserProgramCode**.
If the method returns 1, print 'valid'. Else print 'invalid'.

Input and Output Format:

Input consists of a string with maximum size of 100 characters.

Output consists of a single string.

Refer sample output for formatting specifications.

Sample Input 1:

acebisouzz

Sample Output 1:

valid

Sample Input 2:

alphabet

Sample Output 2:

invalid

Close

String Occurences

Write a program to count the number of occurences of second word of second sentence in the first sentence.

Return the count as output.

Note - Consider case