Junior C# .NET Developer

Client Name
ValueMomentum

Candidate Name
Komal Dhanraj Shimpi

Date of Attempt
11-Mar-2025

Candidate ID
11165442

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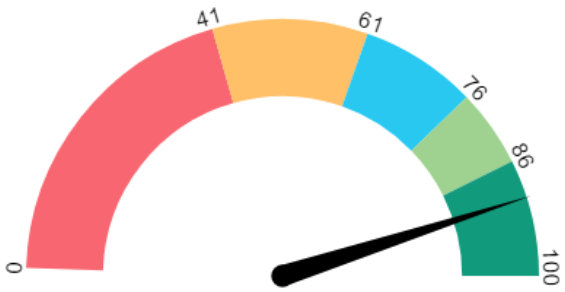
Score Analysis

Score: 32/ 35 **Time Taken: 30 min 50 sec / 47 min**

Expert (91%)



Novice (0% - 40%)

Practitioner (41% - 60%)

Competent (61% - 75%)

Proficient (76% - 85%)

Expert (86% - 100%)

Komal Dhanraj Shimpi scored **91%** and completed assessment in **66%** of the alloted time

Section Score Analysis

Section Skill Analysis

Section 1: C# .Net and Frameworks

Total Score: **5/ 6** Negative Points: **0** Time Taken: **6 min 11 sec/8 min**

Question Analysis:

Total Question: **6** Correct: **5** Wrong: **1** Skipped: **0** Not Answered: **0**

Skills	#Questions	Skill Score
C# Basics	**3**	**2/3**
Dot Net OOPs	**3**	**3/3**

Section 2: Database

Total Score: **2/ 4** Negative Points: **0** Time Taken: **3 min 45 sec/4 min**

Question Analysis:

Total Question: **4** Correct: **2** Wrong: **2** Skipped: **0** Not Answered: **0**

Skills	#Questions	Skill Score
SQL Server	2	2/2
SQL	2	0/2

Section 3: C# Coding

Total Score: **25/ 25** Negative Points: **0** Time Taken: **20 min 54 sec/35 min**

Question Analysis:

Total Question: **2** Correct: **2** Wrong: **0** Skipped: **0** Not Answered: **0**

Skills	#Questions	Skill Score
Coding - Easy	1	10/10
Coding - Medium	1	15/15

Identification of strengths and skill improvement needs

● Strength

Congratulations! We have identified **Object-Oriented Design and Programming, Programming** as your strengths.

● Improvement area

Based on your score, **SQL** are the identified areas of improvement.

A guide to get started on your Individual Development Plan (IDP) :

Difficulty Level Analysis

Level	Number of Questions	Correct Attempts	Correctness
Easy	6	5	83.33%
Medium	4	3	75%
Hard	2	1	50%
Level	Number of Questions	Correct Attempts	Correctness

Proctoring Analysis

Images Captured: 63 **Image Violations: 0**

Image violations detected, within tolerable limit.

Multiple Faces Detected	**0**
No Face Detected	**0**
Unrecognized Face Detected	**0**

Note: The total violations are based on the custom violation settings for this test. The number of consecutive images considered as one violation is configured for all the categories (Unrecognized Face, Multiple Faces, No Face) and may differ from the default settings.

Window Violation: 0 **Time Violation: 0 min**

Test Log

Test Status	Date & Time	Captured IP address
Appeared On	11 Mar 2025, 10:34 AM	103.239.86.58
Completed On	11 Mar 2025, 11:07 AM	103.239.86.58
Report Generated On	11 Mar 2025, 11:07 AM	103.239.86.58

Question Details

Question: **#1**	Type: **Coding**	Skill: **Coding - Easy**	Status: **Answered**
Result: **Correct**	Level: **Easy**	Time Taken: **7 min 46 sec**	Average Time: **15 min 59 sec**
Score: **10 / 10**	Window Violation: **0 times**	Time Violation: **0 sec**	

Question #1

Cost of the String

A coded string is defined as a string in which each character ("a" to "z") is replaced by a binary digit according to the following rule.

- If the character is a vowel, replace the character with the binary digit "1."
- If the character is a consonant, replace the character with the binary digit "0."

A string ***S*** is given, consisting of the lowercase English alphabet.
Convert the string ***S*** to a coded string and then calculate the cost of the coded string ***S***.
The cost of the coded string is the decimal value of the coded string.

Print the cost of the binary string.

Function Description

In the provided code snippet, implement the provided `binaryString(...)` method to print the cost of the binary string. You can write your code in the space below the phrase "`WRITE YOUR LOGIC HERE`".

There will be multiple test cases running so the Input and Output should match exactly as provided.
The base Output variable `result` is set to a default value of `-404` which can be modified. Additionally, you can add or remove these output variables.

Input Format

The input line contains a string, ***S***.

Sample Input

```
abcd      -- denotes S
```

Constraints

1 <= ***S***.size () <= 60
String ***S*** consists of the lowercase English alphabet only.

Output Format

The output contains a single integer denoting the cost of the binary string.

Sample Output

```
8
```

Explanation

S = abcd
The coded binary string = 1000
The decimal value of the coded binary string is 8.
Hence, the output is ***8***.

Answer:

Coding Language: C#

Candidate Code:

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

public class Test{

   public static int binaryString(string S){
      //this is default OUTPUT. You can change it.
      int decimalValue = 0;
      //write your Logic here:
      string vowels ="aeiou";
      string binaryStr ="";
      foreach(char c in S)
      {
         if(vowels.Contains(c))
```

```
        {
            binaryStr +="1";
        }else{
            binaryStr +="0";
        }
    }

    decimalValue = Convert.ToInt32(binaryStr,2);

    return decimalValue;
}


// INPUT [uncomment & modify if required]
public static void Main(){
    string line = "All the Best!";
    List<string> temp = new List<string> { };

    while ( ! string .IsNullOrEmpty (line)){
        line = Console.ReadLine();

        if (line!=null){
            string[] elements = line.Split(' ');

            foreach (string element in elements)
            {
                temp.Add(element);
            }

        }
    }

    string S = temp[0];


    // OUTPUT [uncomment & modify if required]
    Console.WriteLine(binaryString(S));
}

}
```

Compilation Summary:

Compilation Status: **Compile Successfully**	No Of Compilations: **3**
Defualt Input: **wlohfdatjrikg**	Candidate Output: 1092

Test Case Summary:

Test Case: **1** Status: **Pass** Score:**0**

Test Case Input	Expected Output	Actual Output
abcd	8	8

Test Case: **2** Status: **Pass** Score:**2**

Test Case Input	Expected Output	Actual Output
adfrev	34	34

Test Case: **3** Status: **Pass** Score:**2**

Test Case Input	Expected Output	Actual Output
wlohfdatjrikg	1092	1092

Test Case: **4** Status: **Pass** Score:**2**

Test Case Input	Expected Output	Actual Output
qnzscihprbaoexwyfg	4320	4320

Test Case: **5** Status: **Pass** Score:**2**

Test Case Input	Expected Output	Actual Output
opywacvkhdejnzsgqmurbt	2230280	2230280

Test Case: **6** Status: **Pass** Score:**2**

Test Case Input	Expected Output	Actual Output
qproqqjgiflvcwsocub	33802	33802

Question: **#2** Type: **Coding** Skill: **Coding - Medium** Status: **Answered**

Result: **Correct** Level: **Medium** Time Taken: **13 min 8 sec** Average Time: **11 min 43 sec**

Score: **15 / 15** Window Violation: **0 times** Time Violation: **0 sec**

Question #2

Racing Cars

A car showroom has ***N*** racing cars. Each car has a price and bonus associated with it.
The price of the car is denoted by an array ***P[i]*** and the bonus associated is denoted by ***B[i]***.
You can sell ***K*** cars at the most.
The maximum earning of the showroom is the sum of the prices of ***K*** cars multiplied by the

minimum bonus amongst the selected ***K*** cars.

Find the maximum earnings of the showroom by selling at most K cars.

Note
1-based indexing is used.

Function Description
In the provided code snippet, implement the provided `racingCars(...)` method to find the maximum earnings of the showroom by selling at most ***K*** cars. You can write your code in the space below the phrase "`WRITE YOUR LOGIC HERE`".
There will be multiple test cases running, so the Input and Output should match exactly as provided. The base Output variable `result` is set to a default value of `-404`, which can be modified. Additionally, you can add or remove these output variables.

Input Format
The first line contains two integers, ***N*** and ***K***, denoting the number of racing cars and the number of cars you can sell, respectively.
The second line contains ***N*** space-separated integers of ***array P[i]***, denoting the price of the i^{th} car.
The third line contains ***N*** space-separated integers of ***array B[i]***, denoting the bonus associated with the i^{th} car.

Sample Input

```
4 3                 -- denotes N and K
200 400 350 100     -- denotes P[i]
10 10 5 9           -- denotes B[i]
```

Constraints
1 <= ***K*** <= ***N*** <= 100000
1 <= ***P[i]*** <= 100000
1 <= ***B[i]*** <= 100000

Output Format
The output contains an integer denoting the maximum earnings of the showroom by selling at most ***K*** cars.

Sample Output

```
6300
```

Explanation
N = 4
K = 3

You can select at most 3 cars.
For maximum earnings, select 1st, 2nd, and 4th cars.
Prices of the 1st, 2nd, and 4th cars = 200 + 400 + 100 = 700.
The bonus associated with the 1st, 2nd, and 4th cars = 10 10 9 (9 is the minimum bonus among them).

Maximum earning = (200 + 400 + 100) * 9 = 6300.
Hence, the output is ***6300***.

Answer:

Coding Language: C#

Candidate Code:

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

public class Test{

  public static int racingCars(int N,int K,int[] P,int[] B){
    //this is default OUTPUT. You can change it.

    //write your Logic here:
    int maxEarnings = 0;
    int priceSum=0;
    int minBonus = int.MaxValue;
    var cars = new (int price, int bonus)[N];
    for(int i=0; i< N; i++)
    {
      cars[i] = (P[i], B[i]);
    }
    cars = cars.OrderByDescending(car => car.bonus).ToArray();
    for(int i=0; i< K; i++)
    {
      priceSum += cars[i].price;
      minBonus = Math.Min(minBonus, cars[i].bonus);
      int earnings= priceSum * minBonus;
      maxEarnings = Math.Max(maxEarnings,earnings);
    }

    return maxEarnings;
  }


  // INPUT [uncomment & modify if required]
  public static void Main(){
    string line = "All the Best!";
    List<string> temp = new List<string> { };

    while ( ! string .IsNullOrEmpty (line)){
      line = Console.ReadLine();

      if (line!=null){
        string[] elements = line.Split(' ');

        foreach (string element in elements)
        {
```

```
            temp.Add(element);
          }

        }
      }

      int N = Convert.ToInt32(temp[0]);
       int K = Convert.ToInt32(temp[1]);
       int[] P = new int[N];
       for(int i = 1+1; i < 1+1+N; i++) {
           P[i-(1+1)] = Convert.ToInt32(temp[i]);
       }
       int[] B = new int[N];
       for(int i = 1+1+N; i < 1+1+N+N; i++) {
           B[i-(1+1+N)] = Convert.ToInt32(temp[i]);
       }


      // OUTPUT [uncomment & modify if required]
      Console.WriteLine(racingCars(N,K,P,B));
   }

}
```

Compilation Summary:

Compilation Status: **Compile Successfully**	No Of Compilations: **5**
Defualt Input:	Candidate Output:
4 3 200 400 350 100 10 10 5 9	`6300`

Test Case Summary:

Test Case: **1** Status: **Pass** Score:**0**

Test Case Input	Expected Output	Actual Output
4 3200 400 350 10010 10 5 9	`6300`	`6300`

Test Case: **2** Status: **Pass** Score:**3**

Test Case Input	Expected Output	Actual Output
2 2100 10020 40	`4000`	`4000`

Test Case: **3** Status: **Pass** Score:**3**

Test Case Input	Expected Output	Actual Output

Test Case Input	Expected Output	Actual Output
1 110010	1000	1000

Test Case: **4** Status: **Pass** Score:**3**

Test Case Input	Expected Output	Actual Output
1 010010	0	0

Test Case: **5** Status: **Pass** Score:**3**

Test Case Input	Expected Output	Actual Output
5 23 2 4 3 15 2 4 3 2	28	28

Test Case: **6** Status: **Pass** Score:**3**

Test Case Input	Expected Output	Actual Output
7 546 90 409 29 94 100 5839 92 81 40 96 78 45	54054	54054

Disclaimer

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