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Section: 41-J2

Assessment – 04

Date: 20.09.2024

Question - 01: *Count the number of vowels in the string.*

Code:

```
#include <stdio.h>

int main()
{
    char str[100];
    int vowels = 0;

    printf("Enter a string: ");
    gets(str);

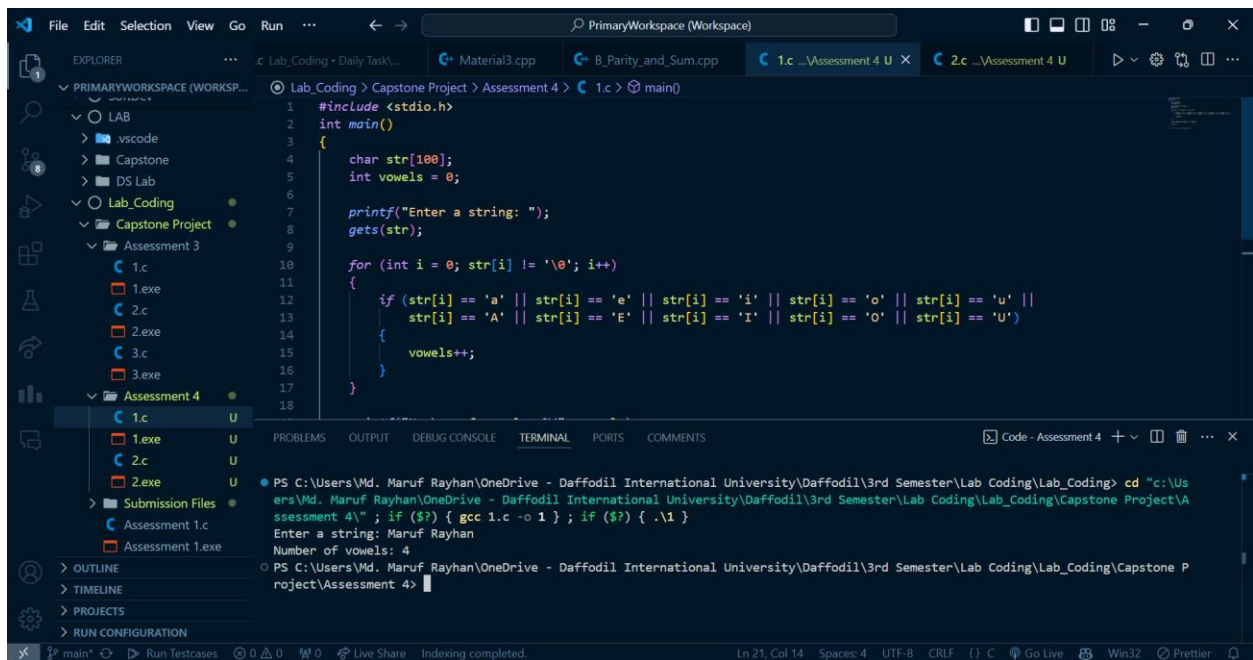
    for (int i = 0; str[i] != '\0'; i++)
    {
        if (str[i] == 'a' || str[i] == 'e' || str[i] == 'i' || str[i] == 'o' || str[i] == 'u' ||
            str[i] == 'A' || str[i] == 'E' || str[i] == 'I' || str[i] == 'O' || str[i] == 'U')
        {
            vowels++;
        }
    }

    printf("Number of vowels: %d", vowels);

    return 0;
}
```

// Author: Md. Maruf Rayhan (623) :D

Attachments:



```
1 #include <stdio.h>
2 int main()
3 {
4     char str[100];
5     int vowels = 0;
6
7     printf("Enter a string: ");
8     gets(str);
9
10    for (int i = 0; str[i] != '\0'; i++)
11    {
12        if (str[i] == 'a' || str[i] == 'e' || str[i] == 'i' || str[i] == 'o' || str[i] == 'u' ||
13            str[i] == 'A' || str[i] == 'E' || str[i] == 'I' || str[i] == 'O' || str[i] == 'U')
14        {
15            vowels++;
16        }
17    }
18 }
```

PS C:\Users\Md. Maruf Rayhan\OneDrive - Daffodil International University\Daffodil\3rd Semester\Lab Coding\Lab_Coding> cd "C:\Users\Md. Maruf Rayhan\OneDrive - Daffodil International University\Daffodil\3rd Semester\Lab Coding\Lab_Coding\Capstone Project\Assessment 4\"; if (\$?) { gcc 1.c -o 1 }; if (\$?) { .\1 }

Enter a string: Maruf Rayhan
Number of vowels: 4

Question - 02: Reverse the string without using any built-in functions.

Code:

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    char str[100];
```

```
    int i, j, temp;
```

```
    printf("Enter a string: ");
```

```
    gets(str);
```

```
    for (i = 0, j = 0; str[j] != '\0'; j++)
```

```
    {
```

```
        j--;
```

```
while (i < j)
{
    temp = str[i];
    str[i] = str[j];
    str[j] = temp;
    i++;
    j--;
}

printf("Reverse string: %s", str);

return 0;
}

// Author: Md. Maruf Rayhan(623) :D
```

Attachments:

```
1 #include <stdio.h>
2 int main()
3 {
4     char str[100];
5     int i, j, temp;
6     printf("Enter a string: ");
7     gets(str);
8
9     for (i = 0, j = 0; str[j] != '\0'; j++)
10         ;
11     j--;
12
13     while (i < j)
14     {
15         temp = str[i];
16         str[i] = str[j];
17         str[j] = temp;
18         i++;
19         j--;
20     }
21 }
```

PS C:\Users\Md. Maruf Rayhan\OneDrive - Daffodil International University\Daffodil\3rd Semester\Lab Coding\Lab_Coding> cd "c:\Users\Md. Maruf Rayhan\OneDrive - Daffodil International University\Daffodil\3rd Semester\Lab Coding\Lab_Coding\Capstone Project\Assessment 4\" ; if (\$?) { gcc 2.c -o 2 } ; if (\$?) { .\2 }

Enter a string: Maruf
Reverse string: furam

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