

( SET A )

**Q1**

```
#include<stdio.h>

#include<string.h>

int main()
{

    char str[100];

    printf("Enter the string :");

    gets(str);

    //scanf("%s",str);

int count_vowels=0;
int count_consonants=0;

    strlwr(str);

    for(int i=0;i<strlen(str);i++)
    {

        if(str[i]=='a' | | str[i]=='e' | | str[i]=='i' | | str[i]=='o' | | str[i]=='u')

        {

            count_vowels++;

        }

        if((str[i]=='a' | | str[i]=='e' | | str[i]=='i' | | str[i]=='o' | | str[i]=='u') | | (str[i]>='0'&&str[i]<='9'))

        {

            count_consonants++;

        }

    }

    printf("\nVowels is %d",count_vowels);

    printf("\nConsonent is %d",count_consonants);

int count_digit=0;

    for(int i=0;i<strlen(str);i++)
```

```

{
    if(str[i]>='0'&&str[i]<='9')
    {
        count_digit++;
    }
}

printf("\nDigit is %d",count_digit);

int count_space=0;
for(int i=0;i<strlen(str);i++)
{
    if(str[i]==' ')
    {
        count_space++;
    }
}

printf("\nSpace is %d",count_space);

return 0;
}

```

**Output :-**

The screenshot shows a Windows terminal window with the following content:

```

PS C:\Users\USER\Desktop\End_Model_Test> cd "c:\Users\USER\Desktop\End_Model_Test\" ; if ($?) { gcc 1.c -o 1 } ; if ($?) { .\1 }
Enter the string :ra hu231
Vowels is :2
Consonant is :3
Digit is :2
Space is :1
PS C:\Users\USER\Desktop\End_Model_Test>

```

The terminal window also shows the file explorer on the left with files like 1.c, 1.exe, 2.c, 2.exe, Q1.c, Q1.exe, Q2.c, Q2.exe, Q3.c, Q3.exe, and tempCodeRunnerFile.C. The status bar at the bottom indicates the current line and column (Ln 5, Col 96) and the system time (09:58 AM, 21-09-2024).

## Q2

```
#include<stdio.h>

int main()
{

    int n,rev=0,rem,;

    printf("Enter Number :");

    scanf("%d",&n);

    while(n!=0)
    {

        rem=n%10;

        rev=(rev*10)+rem;

        n=n/10;

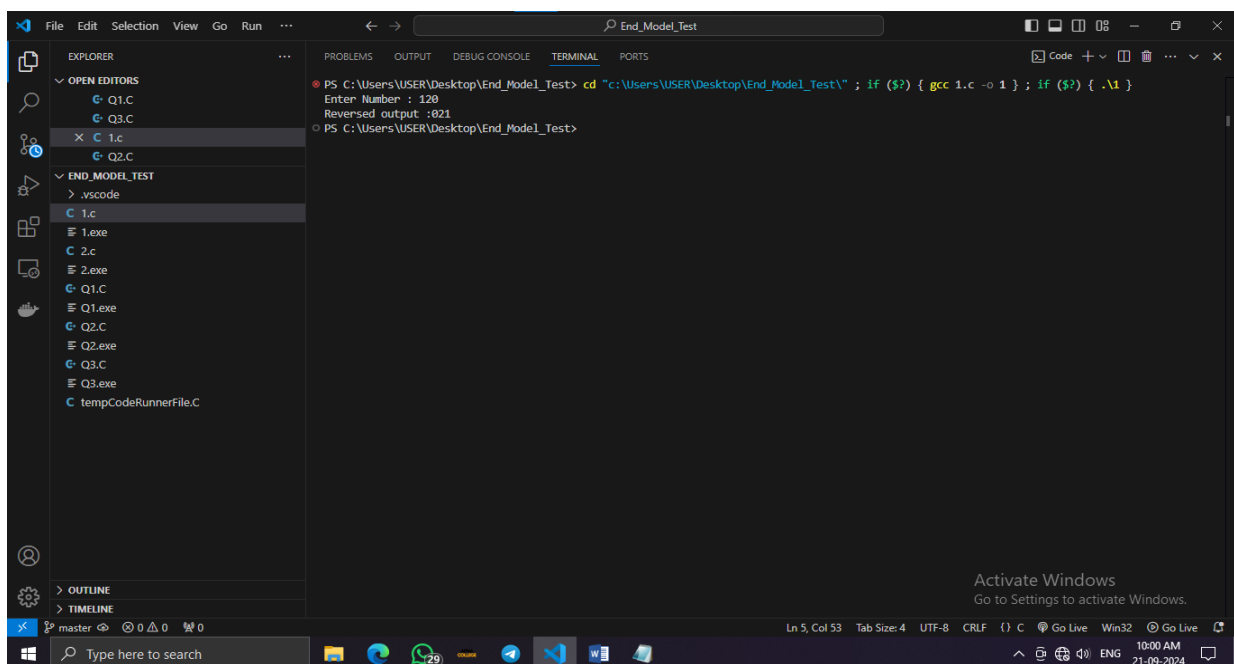
    }

    printf("\nReversed output :%d",reverse);

    return 0;

}
```

## Output :



```
File Edit Selection View Go Run ...
End_Model_Test
EXPLORER
OPEN EDITORS
Q1.C
Q3.C
1.c
2.C
END_MODEL_TEST
.vscode
1.c
1.exe
2.c
2.exe
Q1.C
Q1.exe
Q2.C
Q2.exe
Q3.C
Q3.exe
tempCodeRunnerFile.C
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\USER\Desktop\End_Model_Test> cd "c:\Users\USER\Desktop\End_Model_Test" ; if ($?) { gcc 1.c -o 1 } ; if ($?) { .\1 }
Enter Number : 128
Reversed output : 821
PS C:\Users\USER\Desktop\End_Model_Test>
Activate Windows
Go to Settings to activate Windows.
Ln 5, Col 53 Tab Size: 4 UTF-8 CRLF {} C Go Live Win32 Go Live
Type here to search
```

### Q3

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

```
#include<string.h>
```

```
typedef struct product{
```

```
    char name[10];
```

```
    int id;
```

```
    double price;
```

```
}product;
```

```
int main()
```

```
{
```

```
    int discount ,GST;
```

```
    int n;
```

```
    printf("How many product you add :");
```

```
    scanf("%d",&n);
```

```
    product arr[10];
```

```
    for(int i=0;i<n;i++)
```

```
    {
```

```
        printf("\nProduct");
```

```
        printf("\nEnter id:");
```

```
        scanf("%d",&arr[i].id);
```

```
        printf("Enter Name:");
```

```
        scanf("%s",arr[i].name);
```

```
        printf("Enter price:");
```

```
        scanf("%lf",&arr[i].price);
```

```
    }
```

```
For(int i=0;i<n;i++){

    if(arr[i].price>500)
    {
        discount=arr[i].price-((arr->price*20)/100);
        printf("\nTotal discount on price will be :%d\n",discount);
    }
    else if(arr[i].price<500)
    {
        discount=arr[i].price-((arr->price*5)/100);
        printf("\nTotal discount on price will be :%d\n",discount);
    }
    else
    {
        printf("no op");
    }

}
```

//display

```
for(int i=0;i<n;i++)
{
    printf("\n\nDisplay details of product %d",i+1);
    printf("\n%d",arr[i].id);
    printf("\n%s",arr[i].name);
    printf("\n%lf",arr[i].price);

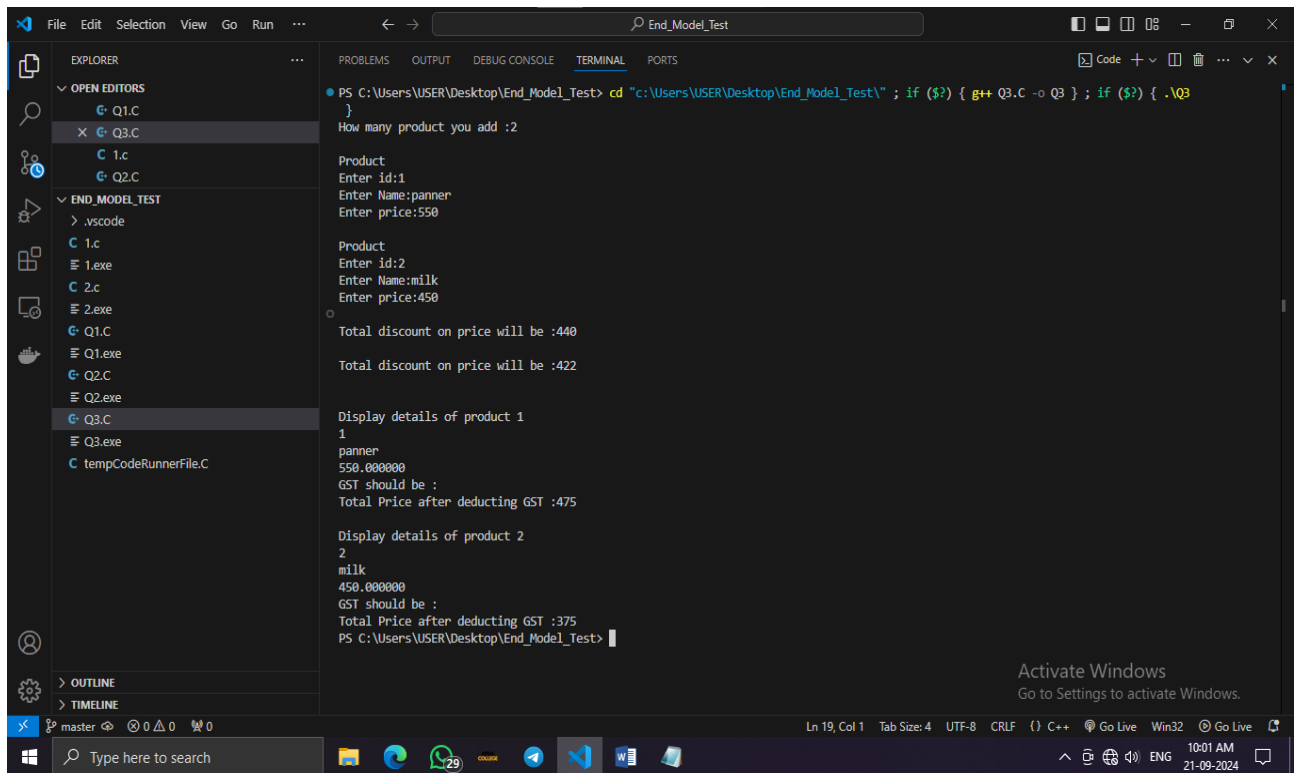
    printf("\nGST should be :");
    GST=arr[i].price-(discount*18)/100;
    printf("\nTotal Price after deducting GST :%d",GST);
}
```

```
}
```

```
return 0;
```

```
}
```

## Output :-



```
PS C:\Users\USER\Desktop\End_Model_Test> cd "c:\Users\USER\Desktop\End_Model_Test\" ; if ($?) { g++ Q3.C -o Q3 } ; if ($?) { .\Q3
}
How many product you add :2

Product
Enter id:1
Enter Name:panner
Enter price:550

Product
Enter id:2
Enter Name:milk
Enter price:450

Total discount on price will be :440

Total discount on price will be :422

Display details of product 1
1
panner
550.000000
GST should be :
Total Price after deducting GST :475

Display details of product 2
2
milk
450.000000
GST should be :
Total Price after deducting GST :375
PS C:\Users\USER\Desktop\End_Model_Test>
```