

```
//end module
```

Q1.

```
//Q1
```

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

```
void main(){
```

```
    char str[]="aei zpo 12";
```

```
    int v=0,c=0,s=0,d=0;
```

```
    for(int i=0;str[i]!='\0';i++){
```

```
        if(str[i]=='a' || str[i]=='A' ||
```

```
           str[i]=='e' || str[i]=='E' ||
```

```
           str[i]=='i' || str[i]=='I' ||
```

```
           str[i]=='o' || str[i]=='O' ||
```

```
           str[i]=='u' || str[i]=='U'){
```

```
            v++;
```

```
            //printf("V:%d\n",v);
```

```
        }
```

```
    else{
```

```
        if(str[i]==' '){
```

```
            s++;
```

```
            //printf("S:%d\n",s);
```

```
        }
```

```
    else{
```

```
        if(str[i]>='A'&&str[i]<='Z' || str[i]>='a'&& str[i]<='z'){
```

```
            c++;
```

```
            //printf("C:%d\n",c);
```

```
        }
```

```
    else{
```

```
        if(str[i]>='0' && str[i]<='9'){
```

```
            d++;
```

```

        //      printf("D:%d\n",d);
    }

}

}

}

}

printf("Str:%s\n",str);

printf("vowels:%d consonants:%d space:%d digits:%d",v,c,s,d );

}

```

o/p

The screenshot shows an IDE window titled "C:\Users\prach\OneDrive\Desktop\First_Bit_Solutions\New folder\endmodule\Q1.c - [Executing] - Embarcadero Dev-C++ 6.3". The code in the editor is as follows:

```

17 else{
18     if(str[i]==' '){
19
20
21 Str:aei zpo 12
22 vowels:4 consonants:2 space:2 digits:2
23 -----
24 Process exited after 0.01103 seconds with return value 38
25 Press any key to continue . . . |
26
27
28
29
30
31
32
33
34
35
36
37
38

```

The output window displays the following text:

```

Str:aei zpo 12
vowels:4 consonants:2 space:2 digits:2
-----
Process exited after 0.01103 seconds with return value 38
Press any key to continue . . . |

```

//Q2

//Q2

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

```
#include<math.h>
```

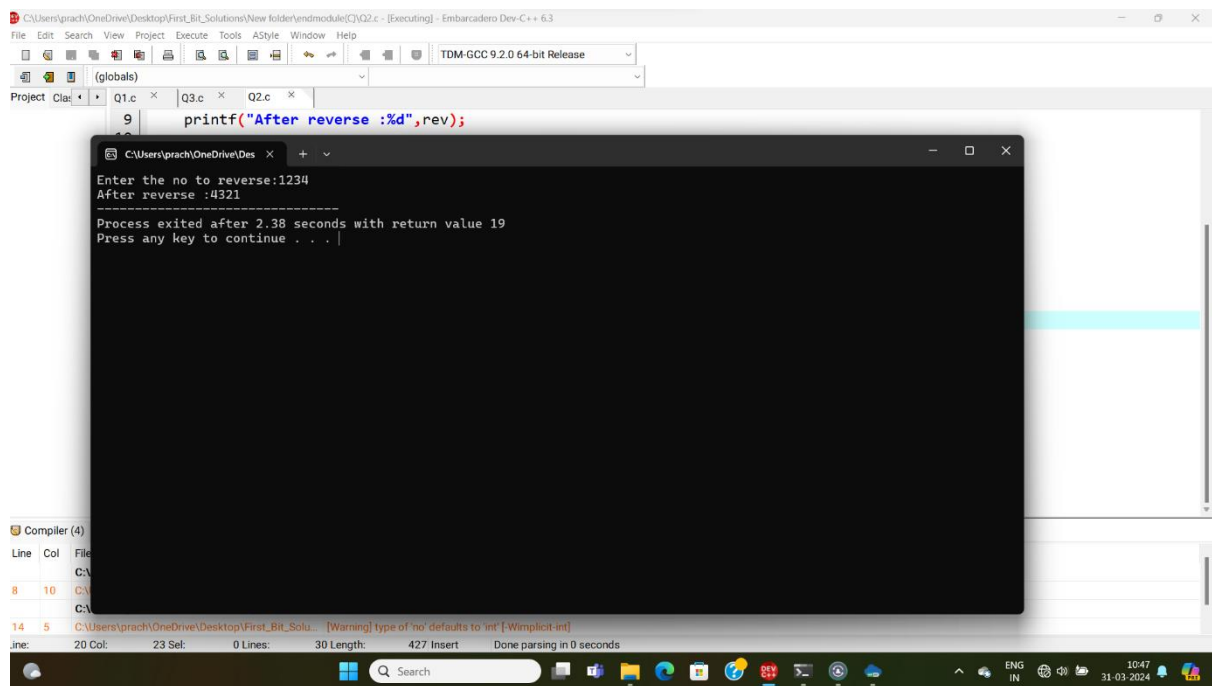
```
void main(){
```

```
    int no;
```

```
    printf("Enter the no to reverse:");
```

```
    scanf("%d",&no);
```

```
int rev=func_rev(no);  
printf("After reverse :%d",rev);  
  
}  
  
int func_rev(no){  
    if(no==0){  
        return 0;  
    }  
    else{  
        int count=0,c,power,num=no;  
        while(num!=0){  
            num=num/10;  
            count++;  
        }  
        c=count-1;  
        power=pow(10,c);  
  
        return ((no%10)*power )+func_rev(no/10);  
    }  
}  
  
//o/p
```



```
//Q3
```

```
//Q3
```

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

```
typedef struct product{
```

```
    int id;
```

```
    char name[20];
```

```
    double price;
```

```
}product;
```

```
void display(product*,int);
```

```
void store(product*,int);
```

```
void main(){
```

```
    product p[5];
```

```
    store(p,5);
```

```
    display(p,5);
```

```
}
```

```
void store(product* p,int s){
```

```

double dis;
for(int i=0;i<s;i++){
    printf("\nEnter the value at index:%d\n",i);
    printf("Enter the id:");
    scanf("%d",&p[i].id);
    fflush(stdin);
    printf("Enter the name");
    gets(p[i].name);
    printf("Enter the price:");
    scanf("%lf",&p[i].price);
    if(p[i].price>500){
        dis=p[i].price*0.2;
        printf("\nDiscount is %lf\n",dis);
        p[i].price=p[i].price-dis;
        printf("\nafter discount Price:RS.%lf\n",p[i].price);
    }
    else{
        dis=p[i].price*0.05;
        printf("\nDiscount is:RS. %lf\n",dis);
        p[i].price=p[i].price-dis;
        printf("\nafter discount Price:RS.%lf\n",p[i].price);
    }
}
printf("\n");
}

```

```

void display(product* p,int s){
    double gst,total=0;
    for(int i=0;i<s;i++){
        printf("product at index %d\n",i);
        printf("id:%d\n",p[i].id);
    }
}

```

```

        printf("name:%s\n",p[i].name);
        printf("Price:%lf\n",p[i].price);

        total=total+p[i].price;

        printf("\n");

    }

    printf("Total before gst:RS.%lf\n",total);

    gst=total*0.18;

    printf("Gst:RS.%lf",gst);

    total=total-gst;

    printf("Total after gst:RS.%lf\n",total);

}

```

The screenshot shows the Embarcadero Dev-C++ IDE with the following content:

Console Output:

```

id:1
name:prachiti
Price:475.000000

product at index 1
id:2
name:paras
Price:432.000000

product at index 2
id:3
name:hrtutu
Price:640.000000

product at index 3
id:4
name:pravin
Price:720.000000

product at index 4
id:5
name:pallavi
Price:190.000000

Total before gst:RS.2457.000000
Gst:RS.442.260000Total after gst:RS.2014.740000

-----
Process exited after 37.75 seconds with return value 31
Press any key to continue . . .

```

Compiler Output:

```

- Warnings: 0
- Output Filename: C:\Users\prach\OneDrive\Desktop\First_Bit_Solutions\New folder\endmodule(C)\Q3.exe
- Output Size: 324.3310546875 Kib
- Compilation Time: 0.27s

```

The IDE interface includes a menu bar (File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help), a toolbar, and a status bar at the bottom showing file information (ine: 57 Col: 20 Sel: 0 Lines: 62 Length: 1330 Insert) and system information (Done parsing in 0 seconds, ENG IN, 10:54, 31.03.2024).