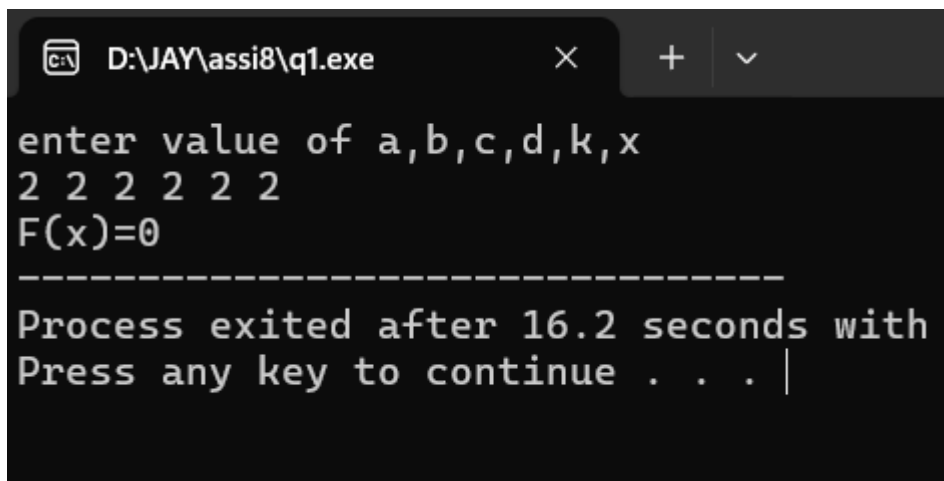


NAME : JAY

U24CS026

Q-1.



```
D:\JAY\assi8\q1.exe
enter value of a,b,c,d,k,x
2 2 2 2 2 2
F(x)=0
-----
Process exited after 16.2 seconds with
Press any key to continue . . . |
```

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

```
int main(){
```

```
    int a,b,c,d,k,x;
```

```
    printf("enter value of a,b,c,d,k,x \n");
```

```
    scanf("%d %d %d %d %d %d",&a,&b,&c,&d,&k,&x);
```

```
    if(x>k){
```

```
        int f=a*x*x*x-b*x*x+c*x-d;
```

```
        printf("F(x)=%d",f);
```

```
    }
```

```
    else if(x==k){
```

```
        printf("F(x)=0");
```

```
    }
```

```
    else{
```

```

        int f=-a*x*x*x+b*x*x-c*x+d;

        printf("F(x)=%d",f);

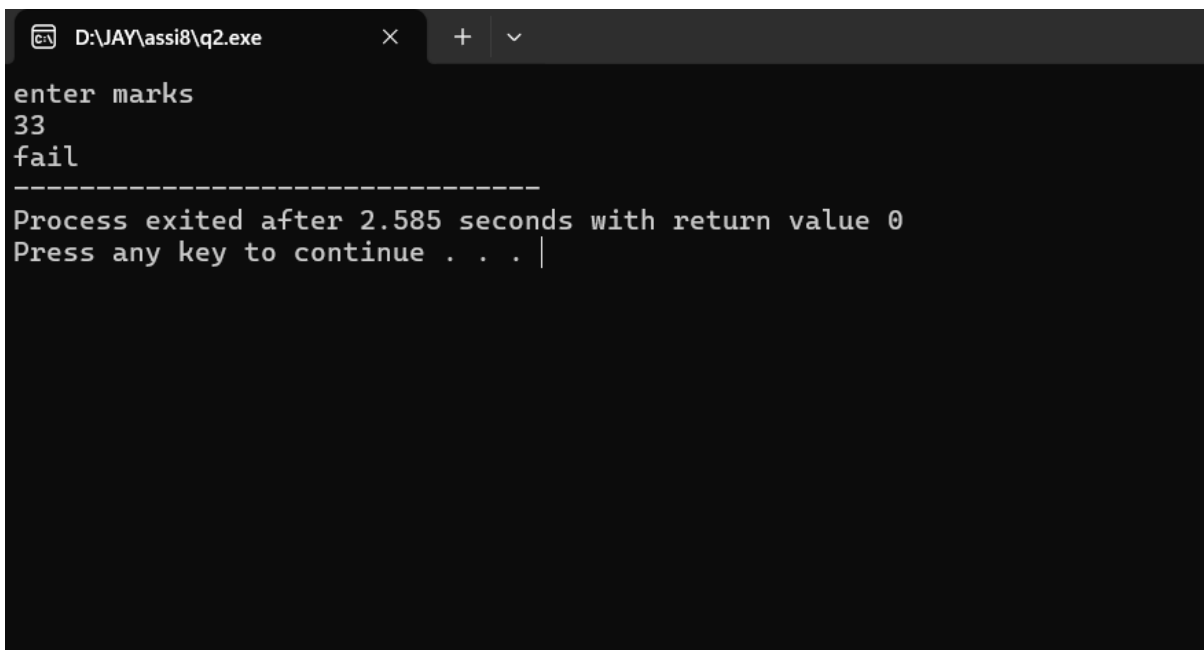
    }

    return 0;

}

```

Q-2.



```

D:\JAY\assi8\q2.exe
enter marks
33
fail
-----
Process exited after 2.585 seconds with return value 0
Press any key to continue . . . |

```

```

#include <stdio.h>

int main(){

    int n;

    printf("enter marks\n");

    scanf("%d",&n);

    if(n<0 || n>100){

        printf("invalid input ");

    }

    else if(n>=80){

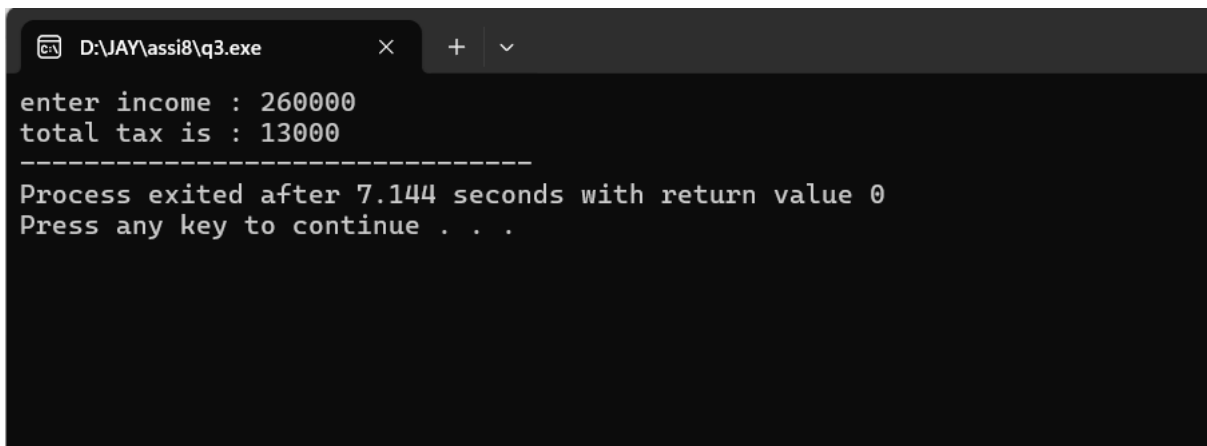
```

```

        printf("Dinstinction");
    }
    else if(n>=60){
        printf("First class");
    }
    else if(n>=35){
        printf("second");
    }
    else{
        printf("fail");
    }
    return 0;
}

```

Q-3.



```

D:\JAY\assi8\q3.exe
enter income : 260000
total tax is : 13000
-----
Process exited after 7.144 seconds with return value 0
Press any key to continue . . .

```

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

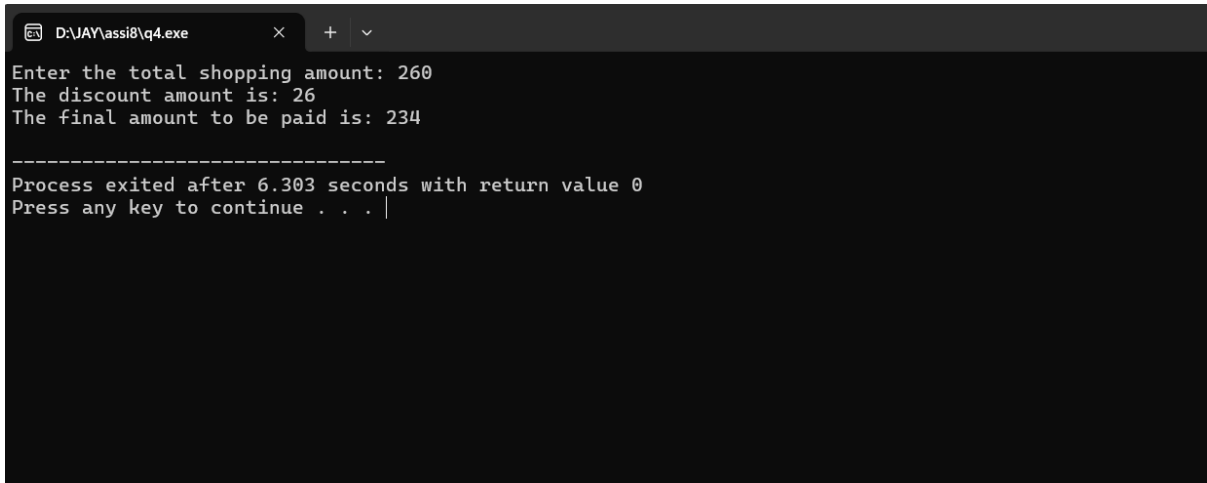
```
int main(){
```

```
    int inc;
```

```
    int tax;
```

```
printf("enter income : ");
scanf("%d",&inc);
if(inc>=250000&&inc<=500000){
    tax = inc*5/100;
}
else if(inc>500000 && inc<=1000000){
    tax = 250000*5/100+(inc-500000)*20/100;
}
else if(inc>=1000000){
    tax = 250000*5/100 + 500000*20/100 + (inc-1000000)*30/100;
}
else{
    printf("no tax applicable");
    tax=0;
}
printf("total tax is : %d",tax);
return 0;
}
```

Q-4.



```
D:\JAY\assi8\q4.exe
Enter the total shopping amount: 260
The discount amount is: 26
The final amount to be paid is: 234

-----
Process exited after 6.303 seconds with return value 0
Press any key to continue . . . |
```

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

```
int main() {
```

```
    int totalAmount, discount = 0.0, finalAmount;
```

```
    printf("Enter the total shopping amount: ");
```

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

```
    if (totalAmount >= 100 && totalAmount <= 200) {
```

```
        discount = totalAmount * 0.05;
```

```
    } else if (totalAmount > 200 && totalAmount <= 400) {
```

```
        discount = totalAmount * 0.10;
```

```
    } else if (totalAmount > 400 && totalAmount <= 800) {
```

```
        discount = totalAmount * 0.20;
```

```
    } else if (totalAmount > 800) {
```

```
        discount = totalAmount * 0.25;
```

```
    }
```

```

finalAmount = totalAmount - discount;

printf("The discount amount is: %d\n", discount);

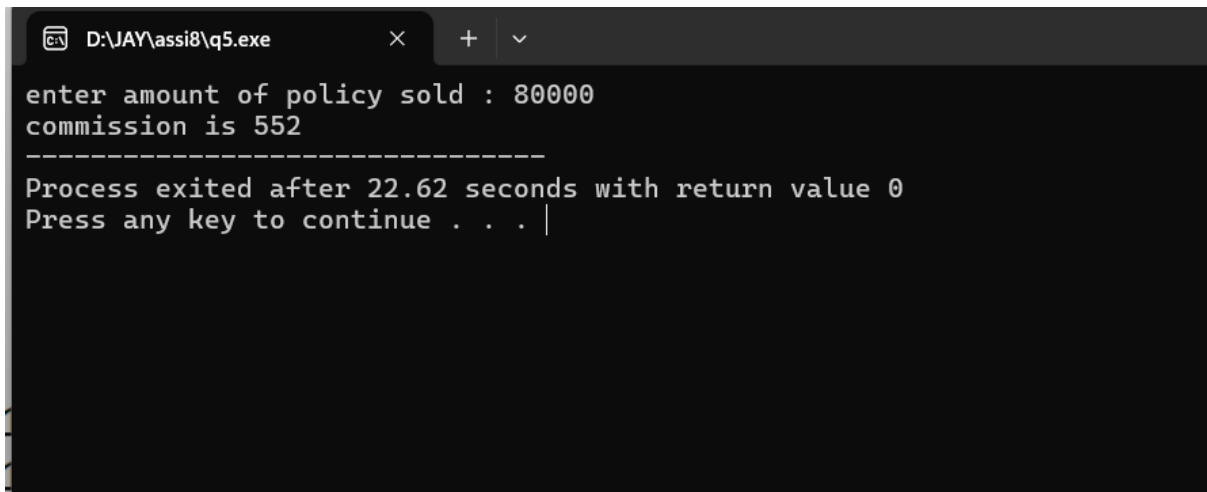
printf("The final amount to be paid is: %d\n", finalAmount);


return 0;

}

```

Q-5.



```

D:\JAY\assi8\q5.exe
enter amount of policy sold : 80000
commission is 552
-----
Process exited after 22.62 seconds with return value 0
Press any key to continue . . . |

```

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

```

int main(){

    int amount;

    printf("enter amount of policy sold : ");

    scanf("%d",&amount);

    int commission;

    if (amount <= 10000)

    { commission = amount * 0.005;

    }

    else if (amount > 10000 && amount < 25000)

    {

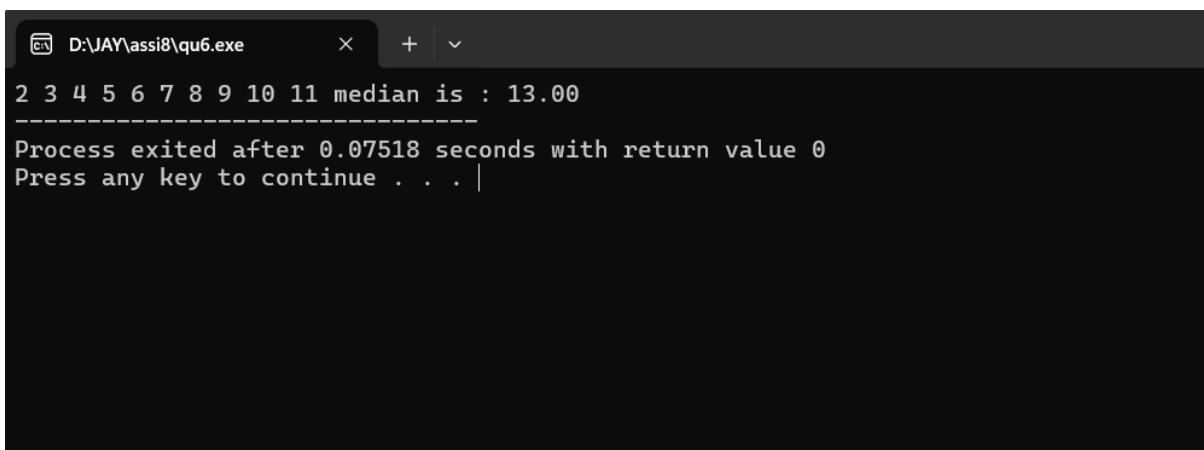
```

```

        commission = 50 + (amount - 10000) * 0.006;
    }
    else {
        commission = 140 + (amount - 25000) * 0.0075;
    }
    printf("commission is %d",commission);
    return 0;
}

```

Q-6.



```

D:\JAY\assi8\qu6.exe
2 3 4 5 6 7 8 9 10 11 median is : 13.00
-----
Process exited after 0.07518 seconds with return value 0
Press any key to continue . . .

```

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

```
int main(){
```

```
    int arr1[5]={5,3,6,7,8};
```

```
    int arr2[5]={2,9,4,11,10};
```

```
    int arr3[10];
```

```
    float median;
```

```
    for(int i=0;i<10;i++){
```

```
        if(i<5){
```

```
            arr3[i]=arr1[i];
```

```

    }
    else{
        arr3[i]=arr2[i-5];
    }
}

int n=10;

int count=0;
while(count<=n){
    for(int j=0;j<n-1;j++){
        if(arr3[j]>arr3[j+1]){
            int temp=arr3[j];
            arr3[j]=arr3[j+1];
            arr3[j+1]=temp;
        }
    }
    count++;
}

for(int k=0;k<10;k++){
    printf("%d ",arr3[k]);
}

if(n%2==0){
    median = arr3[(n/2)-1]+arr3[(n/2)];
}

else{
    median = arr3[n/2];
}

```



```

    }

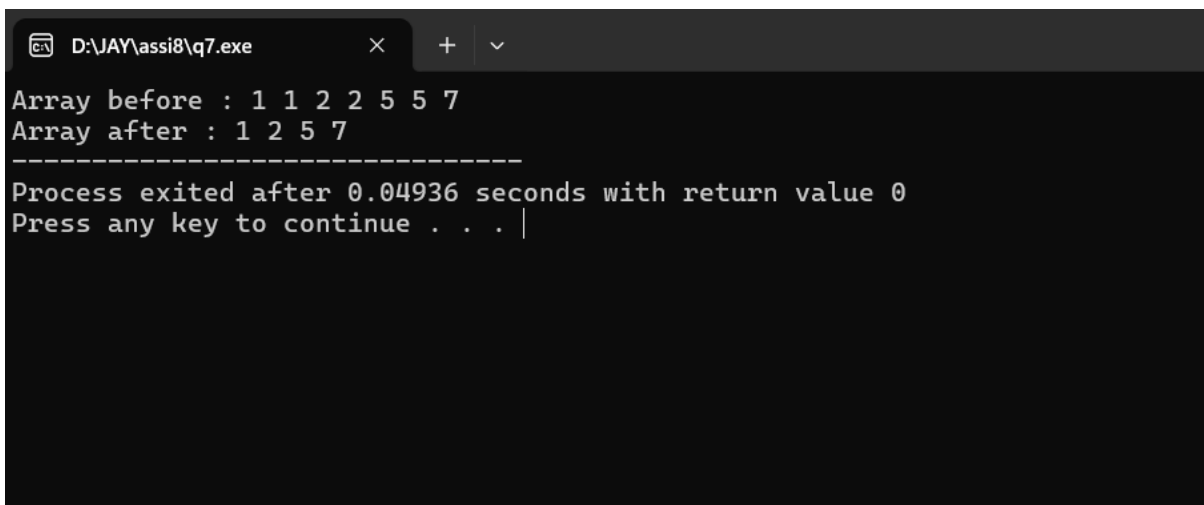
    printf("median is : %.2f",median);

    return 0;

}

```

Q-7.



```

D:\JAY\assi8\q7.exe
Array before : 1 1 2 2 5 5 7
Array after : 1 2 5 7
-----
Process exited after 0.04936 seconds with return value 0
Press any key to continue . . . |

```

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

```
int main(){
```

```
    int arr[7]={1,1,2,2,5,5,7};
```

```
    printf("Array before : ");
```

```
    for(int i=0;i<7;i++){
```

```
        printf("%d ",arr[i]);
```

```
    }
```

```
    int j=0;
```

```
    for(int i=1;i<7;i++){
```

```
        if(arr[i]!=arr[j]){
```

```
            j++;
```

```

        arr[j]=arr[i];
    }
}

printf("\nArray after : ");

for(int i=0;i<j+1;i++){
    printf("%d ",arr[i]);
}

return 0;
}

```

Q-8.

```

D:\JAY\assi8\q8.exe
Enter no. of rows :5
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
-----
Process exited after 1.786 seconds with return value 0
Press any key to continue . . . |

```

```

#include <stdio.h>

int com(int n,int m){

```

```

        if(n==0 || m==0){
            return 1;
        }
        if(m==n){
            return 1;
        }
        int p=1;
        for(int i=1;i<=n;i++){
            p*=i;
        }
        int q=1;
        for(int i=1;i<=m;i++){
            q*=i;
        }
        int t=1;
        for(int i=1;i<=(n-m);i++){
            t*=i;
        }

        return p/(t*q);
    }

    int main(){
        int r;
        com(3,1);
    }

```

```
printf("Enter no. of rows :");
scanf("%d",&r);
for(int i=0;i<r;i++){
    for(int j=0;j<r-i-1;j++){
        printf(" ");
    }
    for(int k=0;k<=i;k++){
        printf("%d ",com(i,k));
    }
    printf("\n");
}
return 0;
}
```