Q1//Write a program to calculate sum of numbers stored in an array of size 10.Take array value from the user.

```
#include<stdio.h>

int main()

{

   int i,a[10],sum=0;

   printf("enter 10 numbers");

   for(i=0;i<=9;i++)

   {

      scanf("%d",&a[i]);

   }

   for(i=0;i<=9;i++)

   {

      sum=sum+a[i];

   }

   printf("sum is %d",sum);

}
```

Q2 //Write a program to calculate average of numbers stored in an array of size 10.Take array value from the user.

```
#include<stdio.h>

int main()

{

   int i,a[10],sum=0;

   float avg;

   printf("enter 10 numbers");

   for(i=0;i<=9;i++)

   {

      scanf("%d",&a[i]);

   }

   for(i=0;i<=9;i++)

   {

      sum=sum+a[i];
```

```
    }
    avg=sum/10.0;
    printf("average is %f",avg);
    return 0;
}
```

Q3 //Write a program to calculate sum of all even numbers and sum of all odd numbers which are as an stored in array size 10 .Take array values from the user

```
#include<stdio.h>
int main()
{
    int i,num[10],se=0,so=0;
    printf("enter 10 numbers ");
    for(i=0;i<=9;i++)
    {
        scanf("%d",&num[i]);
    }
    for(i=0;i<=9;i++)
    {
        if(num[i]%2==0)
            se=se+num[i];
        else
            so=so+num[i];
    }
    printf("\n sum of all even numbers is %d",se);
    printf("\n sum of all odd numbers is %d",so);

    printf("\n");
    return 0l;
}
```

Q4 //Write a program to find greatest number stored in an array size 10.Take array value from the user

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

```
int main()
{
   int i,a[10],max;
   printf("enter 10 numbers");
   for(i=0;i<=9;i++)
   {
      scanf("%d",&a[i]);
   }
   max=a[0];
   for(i=0;i<=9;i++)
      if(max<a[i])
   {
      max=a[i];
   }
   printf("greatest number is %d",max);
   return 0;

}
```

Q5 //Write a program to find the smallest number stored in an array of size 10.Take array value from the user

```
#include<stdio.h>
int main()
{
   int i,a[10],min;
   printf("enter 10 numbers");
   for(i=0;i<=9;i++)
   {
      scanf("%d",&a[i]);
   }
   min=a[0];
   for(i=0;i<=9;i++)
```

```
    {
        if(min>a[i])
            min=a[i];
    }
    printf("smallest number is %d",min);
    return 0;
}
```

Q6 //Write a program to sort elements of an array of size 10.Take array values from the user.

```
#include<stdio.h>
int main()
{
    int i,a[10],j,temp;
    printf("enter the array elements");
    for(i=0;i<=9;i++)
    {
        scanf("%d",&a[i]);
    }
    for(i=0;i<=9;i++)
    {
        for(j=i+1;j<=9;j++)
        {
            if(a[i]>a[j])
            {
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
    }
    printf("array elements are\n");
    for(i=0;i<=9;i++)
```

```
    {
        printf("%d\t",a[i]);
    }
    getch();
    return 0;
}
```

Q7 //Write a program to find second largest in an array.Take array value from the user

```
#include<stdio.h>
int main()
{
    int i,a[10],max2,max0;
    printf("enter the array element");
    for(i=0;i<=9;i++)
    {
        scanf("%d",&a[i]);
    }
    max2=max0=0;
    for(i=0;i<=9;i++)
    {
        if(a[i]>max2)
        {
            max2=max0;
            max0=a[i];
        }
        else if(a[i]>max2&&a[i]<max0)
        {
            max2=a[i];
        }
    }
    printf("second largest element is %d\n",max2);
}
```