Practical 6

1.Declare a single dimensional array with 10 elements Input the values to the array and find the following

I. **Minimum value**
II. **Maximum value**
III. **Average value**
IV. **Reverse order of values**

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

int main()
{
    //1
    int elements[10],i,max,min,sum=0;
    float avg;
    for (i=0;i<10;i++)
    {
        printf("Enter a value to the elements %d ",i+1);
        scanf("%d",&elements[i]);
        sum=sum+elements[i];
        if(elements[i]>max)
        max=elements[0];
```

```
        min=elements[0];
        {
           if(elements[i]>max)
           max=elements[i];
        }
        if(elements[i]<min)
        {
            min=elements[i];
        }
    }
    {
    avg=(float)sum/10.0;
    printf("The avarage is %.2f \n",avg);
    printf("The maximum is %d \n",max);
    printf("The minimum is %d \n",min);
    }
    for (i=9;i>=0;i--)
    {
     printf("Reverse oder of values is %d \n",elements[i]);
    }
    return 0;
}
```

2.Declare to single dimensional array with the size given by the user and find, display the followings

- **Scalar sum**

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

int main()
{

    int arr1[2],arr2[2],i,sum[2];
    for(i=0;i<2;i++){
    printf("Input 1st values ");
    scanf("%d",&arr1[i]);
    printf("Input 2nd values ");
    scanf("%d",&arr2[i]);
    sum[i]=arr1[i]+arr2[i];
    }
    for(i=0;i<2;i++)
    printf("\n%d + %d = %d\n",arr1[i],arr2[i],sum[i]);

    return 0;
}
```

- **Vector sum**

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


int main()
{
   int arr1[2],arr2[2],i,product[2];
```

```
    for (i=0;i<2;i++){
    printf("Input 1st value ");
    scanf("%d",&arr1[i]);
    printf("Input 2nd value ");
    scanf("%d",&arr2[i]);
    product[i]=arr1[i]*arr2[i];
    }
    for(i=0;i<2;i++)
    printf("%4d",product[i]);
    return 0;
}
```

Practical 7

Array(Matrix)

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

int main()
{
    int i,j;
    int array1[3][3] = {3,2,4,1,4,6,4,3,2};
    int array2[3][3] = {2,6,3,4,3,2,5,1,7};
```

```
    int sum[3][3];
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
     {
        printf("%d ",array1[i][j]);
     }
     printf("\t ");
     for(j=0;j<3;j++)
        {
           printf("%d ",array2[i][j]);
        }
     printf("\t ");
     for(j=0;j<3;j++)
        {
           printf("%d ",array1[i][j] + array2[i][j]);
        }
     printf("\n");
    }
   return 0;
}
```