

Assignment 7

Q1 Find the maximum and minimum number in the array

```
#include<stdio.h>

void main () {
    int arr[5];

    int i;
    for(i=0;i<5;i++){
        printf("Enter the numbers:");
        scanf("%d",&arr[i]);
    }
    int min=arr[0];
    for(i=1;i<5;i++){
        if(arr[i]<min){
            min=arr[i];
        }
    }
    printf("Minimum number:%d",min);

    int max=arr[0];
    for(i=1;i<5;i++){
        if(arr[i]>max){
            max=arr[i];
        }
    }
    printf("\nMaximum number:%d",max);
}
```

2. Search the given number in array.

```
#include<stdio.h>

void main(){
    int arr[5];
    int i,j,ele;
    printf("Enter the 5 numbers in the array:");
    for(i=0;i<5;i++){
        scanf("%d",&arr[i]);
    }
    printf("Enter the element you want to search:");
    scanf("%d",&ele);
    for(j=0;j<5;j++){
        if(arr[j]==ele){
            printf("Number %d is at index:%d",ele,j);
        }
    }
}
```

3. Find sum of all numbers.

```
#include<stdio.h>

void main(){
    int arr[5]={4,8,6,3};
    int i,sum=0;
    for(i=0;i<5;i++){
        sum=sum+arr[i];
    }
    printf("Sum of all numbers in a array: %d",sum);
}
```

Q4. Find odd and even among all the numbers

```
#include<stdio.h>

int main(){
    int arr[4];
    int i,j;
    for(j=0;j<5;j++){
        printf("Enter the number:");
        scanf("%d",&arr[j]);
    }
    printf("Even:");
    for(i=0;i<=4;i++){
        if(arr[i]%2==0){
            printf(" %d",arr[i]);
        }
    }

    int k;
    printf("\nOdd:");
    for(k=0;k<=4;k++){
        if(arr[k]%2!=0){
            printf(" %d",arr[k]);
        }
    }
}
```

5. Print alternate elements in array.

```
#include<stdio.h>

int main(){
    int arr[5]={3,5,6,9,4};
    int i;
    for(i=0;i<5;i=i+2){
        printf("%d",arr[i]);
    }
}
```

6. Accept array and print only prime numbers of array

```
#include<stdio.h>

void main(){
    int arr[6]={3,6,8,5,3,7};
    int i,j,flag=0;
    for(i=0;i<6;i++){
        for(j=2;j<arr[i];j++){
            flag =1;
            if(arr[i]%j==0)
            {
                flag = 0;
                break;
            }
        }
        if(flag==1){
            printf(" %d",arr[i]);
        }
    }
}
```

7. Take two array and add sum in third array.

```
#include<stdio.h>

void main(){
    int arr[5]={1,3,4,5,6};
    int brr[5]={10,30,40,50,60};
    int sumarr[5];
    int i ,j;
    for(i=0;i<5;i++){
        sumarr[i]=arr[i]+brr[i];
    }
    printf("Sum of two arrays:");
    for(j=0;j<5;j++){
        printf(" %d",sumarr[j]);
    }
}
```

8. Merge two arrays.

```
#include<stdio.h>

void main(){
    int arr[3]={1,2,3};
    int brr[3]={4,5,6};
    int i,j,k;
    int crr[6];
    printf("crr[6]={");
    for(i=0;i<3;i++)
    {
        crr[i]= arr[i];
    }
```

```
    for(j=0;j<3;j++){

        crr[j+3]=brr[j];

    }

    for(k=0;k<6;k++){

        printf("%d",crr[k]);

    }

    printf("{}");

}
```

9. Reverse the given array.

```
#include<stdio.h>

void main(){

    int arr[4]={5,6,7,8};

    int i;

    for(i=3;i>-1;i--){

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

    }

}
```

10. Sort the array.

```
#include<stdio.h>

void main(){
    int arr[5]={10,40,30,50,20};
    int i,j;
    for(i=0;i<4;i++){
        for(j=0;j<4-i;j++){
            if(arr[j]>arr[j+1]){
                int temp =arr[j];
                arr[j]=arr[j+1];
                arr[j+1]=temp;
            }
        }
    }

    for(i=0;i<5;i++){

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