Assignment 8

1.Find the maximum and minimum number in the array

```
#include<stdio.h>
int main(){
int arr[5];
   int i;
  for(i=0;i<5;i++){
                printf("Enter the numbers:");
        scanf("%d",&arr[i]);
}
min(arr);
                max(arr);
}
void min(int* arr){
 int i;
int min= arr[0];
for(i=1;i<5;i++){
        if(arr[i]<min){
                min=arr[i];
        }
        }
printf("Minimum number:%d",min);
}
void max(int* arr){
        int i;
        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,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);
	search(arr,ele);
}
void search(int* arr,int ele)
{
   int j;
	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];
	int i;
	printf("Enter the numbers in array:");
	for(i=0;i<5;i++){
		scanf(" %d",&arr[i]);
	}
	sum_numbers(arr);
}
void sum_numbers(int* arr){

		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 j;
        for(j=0;j<5;j++){
                printf("Enter the number:");
                scanf("%d",&arr[j]);
        }
         even(arr);
         odd(arr);
}
void even(int* arr){

    int i;
                printf("Even:");
                for(i=0;i<=4;i++){
                if(arr[i]%2==0){
                printf(" %d",arr[i]);
                }
        }
}




void odd(int* arr){
        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];
        int j;
        printf("Enter the array:");
        for(j=0;j<5;j++){
                scanf("%d",&arr[j]);
        }
         alternate(arr);
}
void alternate(int* arr){
                 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;
        prime(arr);

}
void prime(int* arr){
        int i,j;
        int 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

```
//Examplearr[5]= {1,2, 3, 4,5}
//brr[5]={10,20,30, 40, 50}
//crr[5]={11,22,33,44,55}

#include<stdio.h>

void main(){

        int arr[5]={1,3,4,5,6};
    int brr[5]={10,30,40,50,60};

    sum(arr,brr);
}

void sum(int* arr, int* brr){


    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};
        merge(arr,brr);
}
void merge(int* arr,int* brr){
        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];
         }
        or(k=0;k<6;k++){
                printf("%d",crr[k]);



         }
```

9. Reverse the given array.

```
#include<stdio.h>
void main(){

                int arr[4];
                int j;
                printf("Enter the numbers of array:");
                for(j=0;j<4;j++){
                        scanf("%d",&arr[j]);
                }
                rev(arr);

}
void rev(int* arr){
                int i;
        for(i=3;i>-1;i--){

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



}
```

10. Sort the array.

```
#include<stdio.h>

void main(){

        int arr[5];

        int k;
        printf("Enter the numbers:");
        for(k=0;k<5;k++){

                        }

         sort(arr);


}

void sort(int* arr){


        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]);
        }
}
```