ASSIGNMENT 5

Q1 Write a C program to generate first 15 Fibonacci Numbers (Use arrays)
Expected Output
The First 15 Fibonacci Numbers are :
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377

```
#include<stdio.h>
int main(){
    int i,n[15],a=15;
    n[0]=0;
    n[1]=1;
    printf("The first %d Fibonacci numbers are:\n",a);
    for (i=0;i<a;i++){
                if(i==0){
                        printf("%d\n",n[0]);
                }else if(i==1){
                        printf("%d\n",n[1]);
                }else{
                        n[i]=n[i-1]+n[i-2];
                        printf("%d\n",n[i]);
                }
    }
    return 0;
}
```

Q2 Write a C program to generate first 50 Prime Numbers (Use arrays)

Expected Output :

The first 15 Prime Numbers are : 2 3 5 7 11 13 17 19 23 29 31 37 41 43 47

```c
#include<stdio.h>
int main(){
        int num[50],n=50,i=2,a=0;
        printf("The first 50 prime numbers are: \n");
        while(i>0){
                int count=0;
                for(int j=2;j<=i;j++){
                     if(i%j==0){
                     count++;
                     }
                }
                if(count==1){
                num[a]=i;
                printf("%d\n",num[a]);
                a++;
                }
                if(a==n){
                break;
                }
                i++;
        }
        return 0;
}
```

Q3 Write a C Program to find the Maximum Value in an Array. Take input from the user.

```c
#include<stdio.h>
int main(){
     int a;
     printf("enter the length of array: ");
     scanf("%d",&a);
     int max[a],i;
     for(i=0;i<a;i++){
             printf("\nEnter the %d value: ",(i+1));
             scanf("%d",&max[i]);
     }
     int maxi=max[0];
     for(int j=1;j<a;j++){
                if(max[j]>maxi){
                        maxi=max[j];
                }
     }
  printf("\nMaximum value in the array is: %d\n",maxi);
  return 0;
}
```

Q4 Write a C Program to find the Minimum Value in an Array by using functions.Take inputs from the user.

```c
#include<stdio.h>
int arr(int m[],int l);
int main(){
      int a;
      printf("Enter the length of array :");
      scanf("%d",&a);
      int m[a],l=a;
      int c=arr(m,l);
      printf("\nMinimum value in the array is : %d\n",c);
      return 0;
}

int arr(int m[],int l){
        for(int i=0;i<l;i++){
                printf("Enter the %d value :",(i+1));
                scanf("%d",&m[i]);
                }
        int min=m[0];
        for(int j=1;j<l;j++){
                if(m[j]<min){
                        min=m[j];
                }
        }
        return min;
}
```