KIET Group of Institutions, Ghaziabad
Department of Computer Applications
(An ISO – 9001: 2015 Certified & 'A' Grade accredited Institution by NAAC)
Problem Solving Using C Lab
KCA 151: Session 2020-21

Experiment – No-7

Objective: Program to implement MENU DRIVEN ARRAY MAX(),MIN(),SUM()		
Scheduled Date	**Compiled Date**	**Submission Date**
11-JAN-2021	**11-JAN-2021**	**17-JAN-2021**

ALGORITHM:

1. START.
2. CREATE FUNCTION MINIMUM(),MAXIMUM(),SUMOF().
3. DECLARE ARRAY AND VARIABLES I,SIZE,MIN,MAX,SUM OF INTERGER TYPE.
4. ASK SIZE OF AN ARRAY.
5. SCAN ELEMENTS OF AN ARRAY USING LOOP.
6. CALL FUNCTION:
   - **MINIMUN()**
     ```
     int minimum(int arr[],int size){
      int min =  arr[0],i;
     for(i=1;i<size;i++){
      if(min>arr[i])
        min = arr[i];
      }
      return min;
     ```
   - **MAXIMUM()**
     ```
     int maximum(int arr[],int size){
      int max = arr[0],i;
     for(i=1;i<size;i++){
        if(max<arr[i])
         max= arr[i];
        }
      return max;
       }
     ```
   - **SUMOF()**
     ```
     int sumof(int arr[], int size){
     int sum=0,i;
     for(i=0;i<size;i++)
      {
       sum = sum+arr[i];
       }
     ```

```
 return sum;
}
```

FLOWCHART:

```
                    START

                 MINIMUM()
                 MAXIMUM()
                 SUMOF()

                 DECLARE
              ARR[100],I,MIN,MAX,S
                   UM=0

                 SCAN SIZE

            SCAN ELMENTS OF ARRAY
            for(i=0;i<size;i++){
                scanf("%d",&arr[i]);
            }
```

```
printf("min = %d\          int minimum(int arr[],int size){
n",minimum(arr,size));          int min =  arr[0],i;
                                for(i=1;i<size;i++){

                                    if(min>arr[i])
                                       min = arr[i];
                                    }
                                return min;
                                }
```

```
printf("Max = %d\          int maximum(int arr[],int size){
n",maximum(arr,size));          int max = arr[0],i;
                                for(i=1;i<size;i++){
                                    if(max<arr[i])
                                       max= arr[i];
                                    }
                                return max;
```

```
printf("Sum =
%d",sumof(arr,size))
;
```

```
int sumof(int arr[], int size){
    int sum=0,i;
    for(i=0;i<size;i++)
    {
        sum = sum+arr[i];
            }
    return sum;
}
```

END
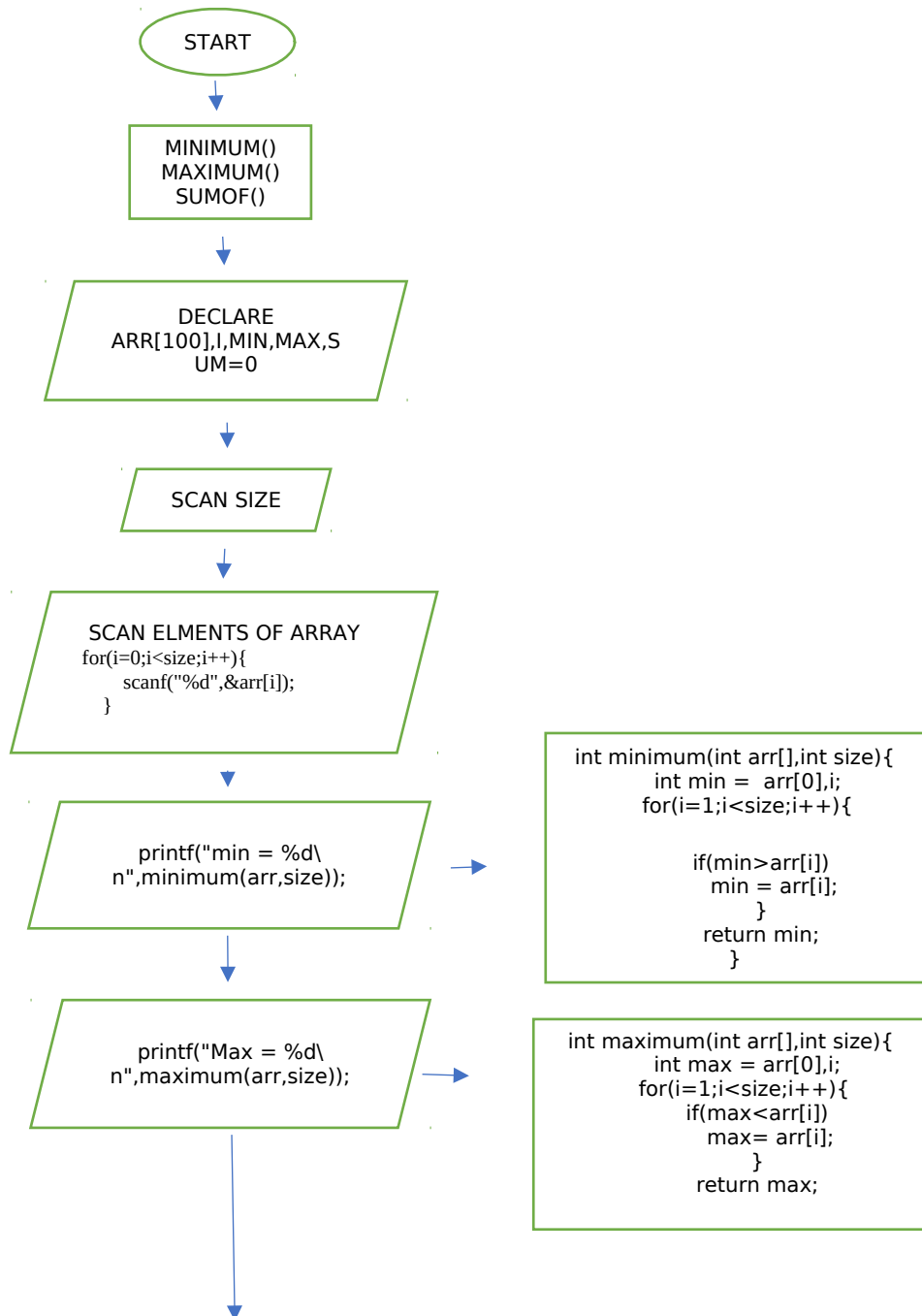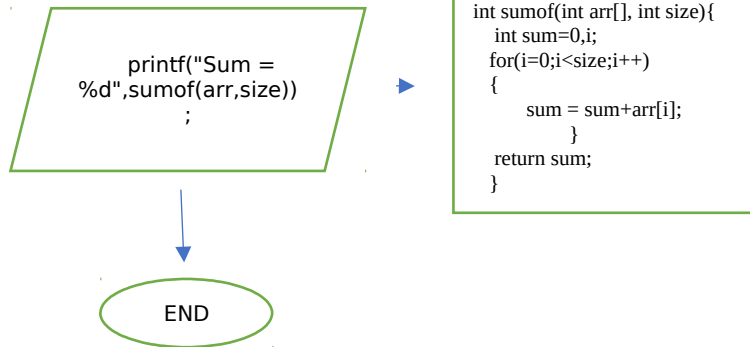
Program :

```c
 #include <stdio.h>
int minimum(int arr[],int size);
int maximum(int arr[],int size);
int sumof(int arr[],int size);
int main()
{

   int arr[100],i,size,min,max,sum=0;
   printf("Enter size of array: ");
   scanf("%d",&size);

   printf("Enter Variable\n");
   for(i=0;i<size;i++){
      scanf("%d",&arr[i]);
   }
   printf("min = %d\n",minimum(arr,size));
   printf("Max = %d\n",maximum(arr,size));
   printf("Sum = %d",sumof(arr,size));
   return 0;
}
int minimum(int arr[],int size){
   int min =  arr[0],i;
   for(i=1;i<size;i++){

      if(min>arr[i])
         min = arr[i];
      }
      return min;
}
int maximum(int arr[],int size){
```

```c
    int max = arr[0],i;
   for(i=1;i<size;i++){
      if(max<arr[i])
         max= arr[i];
      }
      return max;
}
int sumof(int arr[], int size){
   int sum=0,i;
  for(i=0;i<size;i++)
  {
      sum = sum+arr[i];
       }
   return sum;
   }
```

OUTPUT:

```
Enter size of array: 3
Enter Variable
1
2
3
min = 1
Max = 3
Sum = 6
-------------------------------
```

KIET Group of Institutions, Ghaziabad
Department of Computer Applications
(An ISO – 9001: 2015 Certified & 'A' Grade accredited Institution by NAAC)
Problem Solving Using C Lab
KCA 151: Session 2020-21