## **Assignment**

1. Write a C program that store first n Even numbers in an array, where n is equal to the value of last two digits of your roll number.

```
#include <iostream>
      /* run this program using the console pauser or add your own getch, system("pause") or input loop */
 5 ☐ int main() {
 6
7
8
          int i, num;
printf("Enter the limit of array=");
scanf("%d", &num);
 9
10
           for(i=1;i<=num;i++)
11 🖨
12 T
               if(i%2==0)
                   printf("%d\n", i);
14
15
16
17
          return 0;
```

2. Write a program that takes 10 numbers as array input. First it should print the cubes of those numbers.

```
9 🗐 int main() {
             int num, i, array[10];
0
1
            for(i=0;i<10;i++)
2 🗀
3
                  printf("\nArray[%d]=\n", i);
                  scanf("%d", &array[i]);
4
                  printf("Cube= %d\n", array[i]*array[i]*array[i]);
5
6
7
8
9
0
             return 0;
  \blacksquare \  \  \, \text{C:} \\ \text{Users} \\ \text{SUNBLA KHAN} \\ \text{Documents} \\ \text{programming projects} \\ \text{Array\&String.exe} \\
                                                                                                                           ×
Cube= 64
Array[4]=
-
Cube= 125
Array[5]=
-
Cube= 216
Array[6]=
.
Cube= 343
Array[7]=
-
Cube= 512
Array[8]=
-
Cube= 729
Array[9]=
10
Cube= 1000
Process exited after 11.45 seconds with return value 0
```

3. Make a string array with five elements. Sort the array and display the output.

```
15 ☐ int main() {
           char str[5][50];
16
17
           int i;
18
           printf("Enter 5 words :\n");
19
       // Getting strings input
           for (i = 0; i <5; i++) {
    printf("%d-",i);</pre>
20 🗀
21
22
                gets(str[i]);
23
24
           int j;
25
      char temp[50];
26
       // storing strings in the scending alphabetical order
27 E
28 E
29 E
           for (i = 0; i < 5; i++) {
               for (j = i + 1; j < 5; j++) {
    if (strcmp(str[i], str[j]) > 0) {
30
                        strcpy(temp, str[i]);
                         strcpy(str[i], str[j]);
31
32
                         strcpy(str[j], temp);
33
34
35
36
37
           printf("\nIn the ascending alphabetical order: \n");
           38
39 🖨
40
               puts(str[i]);
41
42
43
44
           return 0;
    L<sub>}</sub>
45
 ■ C:\Users\SUNBLA KHAN\Documents\programming projects\ar.exe
                                                                                                                     ×
Enter 5 words
0-Sunbla Khan
1-Laiba Khan
2-Inayat Fatima
3-Fiza Shabbir
4-Warda khan
In the ascending alphabetical order:
Fiza Shabbir
Inayat Fatima
Laiba Khan
Sunbla Khan
Warda khan
Process exited after 54.41 seconds with return value 0
Press any key to continue . . .
```

- 4. Write a program that takes 10 numbers (double) as array input. Perform the following tasks.
- a. Sort numbers in descending orders.
- b. Find Minimum Number
- c. Find count of even number
- d. Find count of odd number
- e. Find count of number divisible by 2.

```
printf("Enter the number %d=",i);
scanf("%d", &array[i]);
               /*printf("Enter the numbers \n");
for (i = 0; i < n; ++i)
scanf("%d", &number[i]);*/
                /* sorting begins ... */
                for (i = 0; i \le n; ++i)
                    for (j = i + 1; j <= n; ++j)
                        if (array[i] < array[j])</pre>
                            a = array[i];
array[i] = array[j];
array[j] = a;
 27
28
 29
30
31
32
33 =
               printf("The numbers arranged in descending order are given below\n");
                for (i = 0; i <= n; ++i)
 34
35
                   printf("%d\n", array[i]);
  C:\Users\SUNBLA KHAN\Documents\programming projects\arraystringQ4.exe
                                                                                                                                                        Enter the number 1=4
Enter the number 2=3
 Enter the number 3=2
 Enter the number 4=6
 Enter the number 5=7
 The numbers arranged in descending order are given below
Process exited after 3.699 seconds with return value 0
Press any key to continue . . .
```

```
#include <iostream>
2  int main() {
    int i, size=10 , minimum, location;
}
 3
              int array[10];
for(i=1;i<=10;i++)
 5
6 = 7
8
9 -
                   printf("Enter the number %d=",i);
scanf("%d", &array[i]);
9
                for (i = 1; i < size; i++)
11 | 12 | 13 | 13 | 1
                   if (array[i] < minimum)</pre>
                       minimum = array[i];
14
15
                       location = i+1;
16
17
             printf("Minimum element is present at location %d and its value is %d.\n", location, minimum);
18
19
20
21
              return 0;
22
23
24
 \blacksquare \hspace{0.1in} \textbf{C:} \textbf{Users} \\ \textbf{SUNBLA KHAN} \\ \textbf{Documents} \\ \textbf{programming projects} \\ \textbf{arraystring} \\ \textbf{Q4.exe} \\
                                                                                                                                                                                       X
Enter the number 1=2
Enter the number 2=3
Enter the number 3=4
Enter the number 4=5
Enter the number 5=6
Enter the number 6=4
Enter the number 7=1
Enter the number 8=2
Enter the number 9=4
Enter the number 10=6
Minimum element is present at location 1 and its value is 1.
Process exited after 6.18 seconds with return value 0
Press any key to continue . . .
```

```
#include <iostream>
2 ☐ int main() {
 3
             int i, size=10;
 4
             int array[10];
 5
         for(i=1;i<=10;i++)
 6 🗀
 7
             printf("Enter the number %d=",i);
 8
             scanf("%d", &array[i]);
9
10
         printf("---output-----");
11
         for (i = 1; i < size; i++)
12 🖨
             if (array[i] %2== 0)
13
14
                printf("%d\n", array[i]);
15
16
17
18
19
         return 0;
20
21
22
23
```

```
Enter the number 1=1
Enter the number 2=2
Enter the number 3=2
Enter the number 3=2
Enter the number 4=3
Enter the number 6=5
Enter the number 6=5
Enter the number 7=6
Enter the number 7=6
Enter the number 10=9
---output-----
2
2
Process exited after 7.865 seconds with return value 0
Press any key to continue . . .
```

```
printf("Enter the number %d=",i);
scanf("%d", &array[i]);
              printf("\n---output-----\n");
for (i = 1; i <= size; i++)</pre>
                  if (array[i] %2!= 0)
                       printf("%d\n", array[i]);
 18
19
20 }
              return 0;
 21
22
 23
 ■ C:\Users\SUNBLA KHAN\Documents\programming projects\arraystringQ4.exe
                                                                                                                                                                                                      X
Enter the number 1=1
Enter the number 2=2
Enter the number 3=3
Enter the number 4=4
Enter the number 5=5
Enter the number 3=3
Enter the number 7=7
Enter the number 8=8
Enter the number 9=9
Enter the number 10=10
---output-----
Process exited after 7.891 seconds with return value 0
Press any key to continue . . .
```

5. Write a program that calculates the length of string. (use mystringlength.c file)

```
#include <iostream>
      #include <string.h>
 3 ☐ int main() {
 4
           char word[50];
 5
           int len;
 6
           printf("Enter the string:");
 7
          gets(word);
 8
           len=strlen(word);
           printf("length=%d", len);
 9
10
               C:\Users\SUNBLA KHAN\Documents\programming projects\arraystringQ4.exe
Enter the string:Sunbla Khan
length=11
Process exited after 4.319 seconds with return value 0
Press any key to continue . . .
```

6. Write a program that finds whether two strings, myStr1 and myStr2 are exactly equal or

```
not. (use mystringcompare.c)
        #include <iostream>
  2
        #include <string.h>
  3 ☐ int main() {
             char word1[50], word2[50];
  4
  5
  6
             printf("Enter the string1:");
  7
             gets(word1);
  8
             printf("Enter the string2:");
  9
             gets(word2);
10
             if(strcmp(word1,word2)==0)
11 🖃
12
                  printf("both string are same");
13
14
             else
15
                  printf("Both String are not same");
16
                                                                                                               ×
                                                                                                          ■ C:\Users\SUNBLA KHAN\Documents\programming projects\arraystringQ4.exe
Enter the string1:Sunbla
Enter the string2:Khan
Both String are not same
Process exited after 5.019 seconds with return value 0
Press any key to continue . . .
```

7. Write a program that concatenates two strings i.e. myStr1 and myStr2 are the two strings and after concatenation myStr1 will have myStr2 joined/concatenated immediately after

## it. (use mystringconcat.c) #include <iostream> #include <string.h> 3 ☐ int main() { 4 char word1[50]="Sunbla", word2[50]="Khan"; 5 strcat(word1,word2); 6 puts(word1); 7 ■ C:\Users\SUNBLA KHAN\Documents\programming projects\arraystringQ4.exe $\times$ SunblaKhan Process exited after 0.01591 seconds with return value 0 Press any key to continue . . .

8. Write a program that copies one string into another string. (use mystringcopy.c)

## Uppercase

```
#include <iostream>
        #include <string.h>
 3 ☐ int main() {
             char word1[50], word2[50]="Sunbla Khan";
  4
  5
             strcpy(word1,word2);
  6
             puts(word1);
  7
  8
 ■ C:\Users\SUNBLA KHAN\Documents\programming projects\arraystringQ4.exe
                                                                                                         _ 🗆
                                                                                                                    \times
Sunbla Khan
Process exited after 0.01447 seconds with return value 0
Press any key to continue . . .
```

9. uppercase.c: This program should input a line from user and print it in uppercase.