

ASSIGNMENT-1

By:

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1ST Semester

CSE



Model Institute of Engineering & Technology (Autonomous)

(Permanently Affiliated to the University of Jammu, Accredited by NAAC with “A” Grade)

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Q1 Write a c program to find the maximum and minimum element in an array.

```

C array.c > main()
1  #include<stdio.h>
2  int main()
3  {
4      int a[100],size,i,max;
5      printf("enter the size of an array");
6      scanf("%d",&size);
7      printf("enter the values in array");
8      for(i=0;i<size;i++)
9      {
10         scanf("%d",&a[i]);
11     }
12     max=a[0];
13     for(i=0;i<size;i++)
14     {
15         if (a[i]>max)
16         {
17             max=a[i];
18         }
19     }
20 }
21 printf("%d",max);
22 return 0;

```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
PS C:\Users\admin\c programs> cd "c:\Users\admin\c programs"
PS C:\Users\admin\c programs> cd "c:\Users\admin\c programs\" ; if ($?) { gcc array.c -o array } ; if ($?) { .\ar

> cd "c:\Users\admin\c programs\" ; if ($?) { gcc array.c -o array } ; if ($?) { .\array }
enter the size of an array 5
enter the values in array 30 31 32 45 65
65
PS C:\Users\admin\c programs>

```

Activate Windows
Go to Settings to activate Windows.

Ln 13, Col 24 Spaces: 4 UTF-8 CRLF {} C windows-gcc-x86

Q2 Write a program for calculator using elseif and do while.

```

1  #include <stdio.h>
2
3  int main() {
4      char operator;
5      double num1, num2, result;
6
7      do {
8          // Menu
9          printf("Enter an operator (+, -, *, /) or 'q' to quit: ");
10         scanf("%c", &operator);
11
12         // Check for quit condition
13         if (operator == 'q' || operator == 'Q') {
14             break; // Exit the loop if 'q' is entered
15         }
16
17         // Input two numbers
18         printf("Enter two numbers: ");
19         scanf("%lf %lf", &num1, &num2);
20
21         // Perform calculation based on the operator
22         if (operator == '+') {
23             result = num1 + num2;
24         } else if (operator == '-') {
25             result = num1 - num2;
26         } else if (operator == '*') {
27             result = num1 * num2;
28         } else if (operator == '/') {
29             // Check for division by zero
30             if (num2 != 0) {
31                 result = num1 / num2;
32             } else {
33                 printf("Error: Division by zero!\n");
34                 continue; // Restart the loop
35             }
36         }
37     } while (1);
38
39     printf("Result: %lf\n", result);
40 }

```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
PS C:\Users\admin\c programs>
PS C:\Users\admin\c programs> cd "c:\Users\admin\c programs"
PS C:\Users\admin\c programs> cd "c:\Users\admin\c programs" ; if ($?) { gcc Calculator.c -o Calculator } ; if ($?) { .\Calculator }
Enter an operator (+, -, *, /) or 'q' to quit: +
Enter two numbers: 23 45
Result: 68.00
Enter an operator (+, -, *, /) or 'q' to quit: q
Calculator closed.
PS C:\Users\admin\c programs>

```