

## Experiment No: 02

**Experiment Name:** Finding Minimum and Maximum number from array.

Here we can find minimum and maximum number from array,

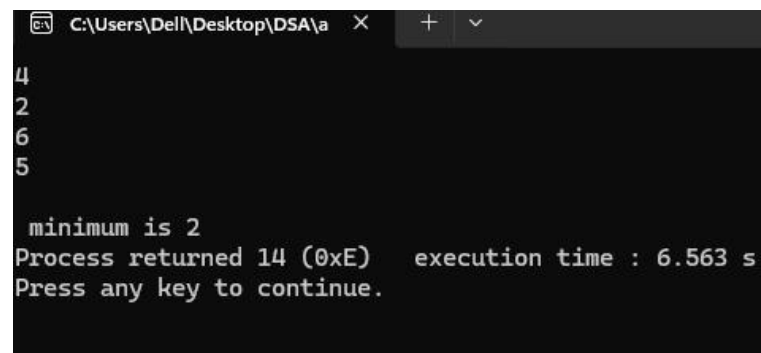
For Minimum:

Source Code:

```
#include<stdio.h>

Int main() {
int A[4], i, x;
for(i=0 ;i<4; ++i)
scanf("%d", &A[i]);
x=A[0];
for(i=1; i<4; ++i) {
if(A[i] < x)
x=A[i];
}
Printf("\nMinimum is %d" , x);
return 0;
}
```

Output:

A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Users\Delh\Desktop\DSA\...' and standard window controls. The command prompt displays the following text: '4', '2', '6', '5' (input values), 'minimum is 2' (output), 'Process returned 14 (0xE) execution time : 6.563 s' (system status), and 'Press any key to continue.' (prompt).

```
C:\Users\Delh\Desktop\DSA\...> 4
2
6
5

minimum is 2
Process returned 14 (0xE) execution time : 6.563 s
Press any key to continue.
```

For Maximum:


Source Code:

```
#include <stdio.h>

int main() {
int A[4], i, x;
for (i = 0; i < 4; ++i) {
scanf("%d", &A[i]);
}
x = A[0];
for (i = 1; i < 4; ++i) {
if (A[i] > x) {
x = A[i];
}
}
printf("\nMaximum is %d", x);
}
```

```
return 0;  
}
```

Output:

A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Users\Del\Desktop\DSA\'. The console output displays the numbers 4, 6, 9, and 3 on separate lines. Below these, it says 'Maximum is 9'. The next line shows 'Process returned 0 (0x0) execution time : 5.214 s'. The final line is 'Press any key to continue.' with a vertical cursor line at the start of the line.

```
C:\Users\Del\Desktop\DSA>  
4  
6  
9  
3  
  
Maximum is 9  
Process returned 0 (0x0) execution time : 5.214 s  
Press any key to continue.  
|
```

**Discussion:** In today's lab we found minimum and maximum number from array. Finding the minimum and maximum numbers in a 1D array is a fundamental problem in programming, often used in beginner-level exercises to practice loops and conditional statements. This task involves traversing the array and comparing its elements to determine the smallest and largest values.