

1)Write a program to find the largest and smallest element in an array.

The screenshot shows the Programiz Online C Compiler interface. The code in the editor is:

```
main.c
1 // Online C compiler to run C program online
2 #include <stdio.h>
3
4 int main() {
5     int a[5] = {5, 2, 9, 1, 7};
6     int max = a[0], min = a[0];
7
8     for (int i = 1; i < 5; i++) {
9         if (a[i] > max)
10             max = a[i];
11         if (a[i] < min)
12             min = a[i];
13     }
14
15     printf("Largest = %d\n", max);
16     printf("Smallest = %d", min);
17
18     return 0;
}
```

The output window shows the results of the execution:

```
Largest = 9
Smallest = 1
==== Code Execution Successful ===
```

2)Write a program to find the factorial of a number using recursion.

The screenshot shows the Programiz Online C Compiler interface. The code in the editor is:

```
main.c
1 // Online C compiler to run C program online
2 #include <stdio.h>
3
4 int fact(int n) {
5     if (n == 0)
6         return 1;
7     return n * fact(n - 1);
8 }
9
10 int main() {
11     printf("Factorial = %d", fact(5));
12     return 0;
13 }
```

The output window shows the results of the execution:

```
Factorial = 120
==== Code Execution Successful ===
```

3)Write a program to find the nth Fibonacci number using recursion.

The screenshot shows the Programiz Online C Compiler interface. The code in the editor is:

```
main.c
1 #include <stdio.h>
2
3 int fib(int n) {
4     if (n == 0)
5         return 0;
6     if (n == 1)
7         return 1;
8     return fib(n - 1) + fib(n - 2);
9 }
10
11 int main() {
12     printf("Fibonacci = %d", fib(6));
13     return 0;
14 }
```

The output window shows the results of the execution:

```
Fibonacci = 8
==== Code Execution Successful ===
```

