

```

1  #include <stdio.h>
2
3  int main() {
4      int num, i;
5      unsigned long long factorial = 1;
6
7      printf("Enter an integer: ");
8      scanf("%d", &num);
9
10     if (num < 0)
11         printf("Factorial is not defined for negative numbers.\n");
12     else {
13         for(i = 1; i <= num; ++i)
14             factorial *= i;
15
16         printf("Factorial of %d = %llu\n", num, factorial);
17     }
18
19     return 0;
20 }

```

```

Enter an integer: 4
Factorial of 4 = 24

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Process exited after 2.548 seconds with return value 0
Press any key to continue . . . |

```

```

1  #include<stdio.h>
2  int main()
3  {
4      int n,i;
5      int first=0,second=1,next;
6
7      printf("enter the number of terms:");
8      scanf("%d",&n);
9
10     printf("fibonacci series:");
11
12     for(i=0;i<n;i++)
13     {
14         if(i<=1)
15             next=i;
16         else
17         {
18             next= second + first;
19             first = second;
20             second = next;
21         }
22         printf("%d",next);
23     }
24     return 0;
25 }
26

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enter the number of terms:4
fibonacci series:0112
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```

Process exited after 2.828 seconds with return value 0
Press any key to continue . . .

```

```

1  #include<stdio.h>
2
3  int fibonacci(int n) {
4      if (n == 0)
5          return 0;
6      else if (n == 1)
7          return 1;
8      else
9          return fibonacci(n - 1) + fibonacci(n - 2);
10 }
11
12
13 int main() {
14     int terms;
15
16     printf("Enter the number of terms: ");
17     scanf("%d", &terms);
18
19     printf("Fibonacci Series:\n");
20     for (int i = 0; i < terms; i++) {
21         printf("%d ", fibonacci(i));
22     }
23
24     printf("\n");
25     return 0;
26 }

```

```

Enter the number of terms: 7
Fibonacci Series:
0 1 1 2 3 5 8

```

```

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Process exited after 5.597 seconds with return value 0
Press any key to continue . . . |

```

```

1  #include <stdio.h>
2
3  unsigned long long factorial(int n) {
4      if (n == 0 || n == 1)
5          return 1;
6      else
7          return n * factorial(n - 1);
8  }
9
10 int main() {
11     int num;
12
13     printf("Enter a positive integer: ");
14     scanf("%d", &num);
15
16     if (num < 0)
17         printf("Factorial is not defined for negative numbers.\n");
18     else
19         printf("Factorial of %d = %llu\n", num, factorial(num));
20
21     return 0;
22 }

```

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Enter a positive integer: 6
Factorial of 6 = 720

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```

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Process exited after 9.695 seconds with return value 0
Press any key to continue . . . |

```

```
1  #include <stdio.h>
2
3  int main() {
4      int a[100], n, key, found = 0;
5
6      printf("Enter number of elements: ");
7      scanf("%d", &n);
8
9      printf("Enter %d elements: ", n);
10     for (int i = 0; i < n; i++)
11         scanf("%d", &a[i]);
12
13     printf("Enter number to search: ");
14     scanf("%d", &key);
15
16     for (int i = 0; i < n; i++) {
17         if (a[i] == key) {
18             printf("Element found at position %d\n", i + 1);
19             found = 1;
20             break;
21         }
22     }
23
24     if (!found)
25         printf("Element not found.\n");
26
27     return 0;
28 }
```



```

1  #include <stdio.h>
2
3  int main() {
4      int a[100], n, key, found = 0;
5
6      printf("Enter number of elements: ");
7      scanf("%d", &n);
8
9      printf("Enter %d elements: ", n);
10     for (int i = 0; i < n; i++)
11         scanf("%d", &a[i]);
12
13     printf("Enter number to search: ");
14     scanf("%d", &key);
15
16     for (int i = 0; i < n; i++) {
17         if (a[i] == key) {
18             printf("Element found at position %d\n", i + 1);
19             found = 1;
20             break;
21         }
22     }
23
24     if (!found)
25         printf("Element not found.\n");
26
27     return 0;
28 }

```

```

Enter number of elements: 7
Enter 7 elements: 1 3 5 6 7 4
6
Enter number to search: 5
Element found at position 3

```

```

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Process exited after 24.99 seconds with return value 0
Press any key to continue . . . |

```