

# 1) Find Second largest element in an array

<https://www.geeksforgeeks.org/find-second-largest-element-array/>

# 2) Program for factorial of a number

<https://www.geeksforgeeks.org/program-for-factorial-of-a-number/>

# 3) C++ Program to check Prime Number

<https://www.geeksforgeeks.org/c-program-to-check-prime-number/>

## Topic: Function Declaration

Question 1: Declare a function number\_sum that takes num1 and num2 in input and returns their sum in the output. num1, num2, and the sum can take integer values.

(You can select multiple correct answers)

A) `int number_sum ( int num1 , int num2 )`

B) `int number_sum ( int num1 , int num2 );`

C) `int number_sum ( int , int )`

D) `int number_sum ( int , int );`

## Topic: Function Calling

Question 2: What is the output of the following code?

```
int number_sum (int num1 , int num2){  
    return num1 + num2;  
}  
  
int main() {  
    float value1 = 10.1;  
    float value2 = 20.9;  
    int sum = number_sum ( value1 , value2 ) ;  
    cout << sum ;  
    return 0;  
}
```

A) 30.9

B) 31

C) 30

D) 29

### Topic: Pass by Value in functions

Question 3: What is the output of the following code?

```
void cube(int number) { //new number –dynamic memory –no  
    number = number * number * number;  
    cout << "number = " << number << endl;  
}
```

```
int main() {  
    int number = 5;  
    cube(number);  
    cout << "number = " << number << endl;  
  
    return 0;  
}
```

A)

number = 5

number = 5

B)

number = 125

number = 125

C)

number = 125

number = 5

D)

number = 5

number = 125

### Topic: Scope of Variables

Question 4: What is the output of the following code?

```
void function1 () {  
    cout << "global = " << global << endl;  
}
```

```
int global = 3;
```

```
void function2 () {  
    cout << "global = " << global << endl;  
}
```

```
int main() {  
    cout << "global = " << global << endl;  
    function1();  
    function2();  
}
```

A)

3

3

3

B)

3

3

C)

3

D)

Error

**Topic: Overwriting the value of global variable**

Question 5:

What is the output of the following code?

```
void function (int local) {  
    local = 10;  
    cout << "local = " << local << endl;  
}  
int main() {  
    int local = 20;  
    function (local);  
    cout << "local = " << local << endl;  
}
```

A)

local = 10

local = 20

B)

local = 20

local = 10

C)

local = 10

local = 10

D)

local = 20

local = 20

Q6) What is the output ?

```
#include <iostream>

using namespace std;

int main() {

    int a = 10;

    while(a > 5) { 10>5

        int a = 1; //- ----

        cout << a << " ";

        A--; //a=0

    }

}
```

## Options

This problem has only one correct answer

- a) 10 9 8 7 6
- b) 1 1 1 1 1
- c) Error
- d) Infinite loop

Q7) What is the output of the following program ?

```
#include<iostream>

using namespace std;

int getValue(int x =0, int y = 0, int z){
```

```
    return (x + y + z);  
}
```

```
int main(){  
  
    cout << getValue(10);  
  
    return 0;  
}
```

## Options

This problem has only one correct answer

- a) 10
- b) 0
- c) 20
- d) **Compilation Error**

Q8) Can we create Jagged Arrays in C++ ?

ANS:- j

Q9) `#include <iostream>`  
`using namespace std;`

```
int main(){  
    int p = 5;  
    int const *q = &p;  
    p++;  
    cout << p << endl;  
    return 0;  
}
```

Q 10) Which statement(s) will give an error for the following code -

```
#include <iostream>  
using namespace std;  
  
int main(){  
    int p = 5;  
    int * const q = &p;  
  
}
```

```
int * const q = &p; => q+ —no container
int const *q = &p; => q = x
```

Container — in-container

=====> This problem may have one or more correct answers

- a) p++;
- b) q++;
- c) (\*q)++;

Q 11) Which statement(s) will give an error for the following code -

```
#include <iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    const int p = 5;
```

```
    int const *q = &p;
```

```
}
```

## Options

This problem may have one or more correct answers

- a) p++;
- b) q++
- c) (\*q)++;

<https://leetcode.com/problems/repeated-string-match/>

<https://leetcode.com/problems/median-of-two-sorted-arrays/>

## Does s contain t ?

Given two string s and t, write a function to check if s contains all characters of t (in the same order as they are in string t).

Return true or false.

Do it recursively.

E.g. : s = "abchjsgsuohhdhyrikkknddg" contains all characters of t="coding" in the same order. So function will return true.

### Input Format :

Line 1 : String s

Line 2 : String t

### Output Format :

true or false

### Sample Input 1 :

Abchjsgsuohhdhyrikkkddg

C o d i

Coding

```
if(t.size()!=i) return -1;
```

### Sample Output 1 :

true

### Sample Input 2 :

abcde

aeb



**Sample Output 2 :**

false