L7A : Functions Practice Questions

1-Tut : Return type

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What is the return type of a method that does not returns any value ?

Options

This problem has only one correct answer

int
double
char
void

Correct Answer : D

Solution Description

####The functions which doesn't return any value, their return type is "void".

2-Tut : Return type

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Let’s say the problem is - You will be given two numbers(both integers) and you need to return their sum.

For this problem, what should be the return type of function -

Options

This problem has only one correct answer

int
boolean
char
void

Correct Answer: A

Solution Description

####We need to return the sum of two integers, which is again an integer. So the sum that we want to return is of type "int". Hence the return type should be "int" for this function.

3-Tut : What is the output

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What will be the output of the following code ?

```
  void func(int a, int b){
   cout << (a + b);
   }

   int main() {
   int a = 7;
```

```
    func(a, 12);
    }
```

Answer

Type here : 19

Correct Answer

4-Tut : What is the output

Send Feedback

What will be the output of the following code ?

```
void demo(int a, int b){
    cout << a << " " << b;
}

int main() {
    int a = 5;
    int b = 15;
    demo(a);
}
```

Options

This problem has only one correct answer

5 0

Compilation Error

5 15

None of these

Correct Answer : B

5-Tut : Fahrenheit to Celsius Table

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Given three values - Start Fahrenheit Value (S), End Fahrenheit value (E) and Step Size (W), you need to convert all Fahrenheit values from Start to End at the gap of W, into their corresponding Celsius values and print the table.

Input Format : 3 integers - S, E and W respectively

Output Format :

Fahrenheit to Celsius conversion table. One line for every Fahrenheit and Celsius Fahrenheit value. Fahrenheit value and its corresponding Celsius value should be separate by tab ("\t")

Constraints :

0 <= S <= 1000

0 <= E <= 1000

0 <= W <= 1000

Sample Input 1:

0

100

20

Sample Output 1:

0 -17

20 -6
40 4
60 15
80 26
100 37

Sample Input 2:

120
200
40

Sample Output 2:

120 48
160 71
200 93

Explanation for Sample Output 2 :

Start value is 120, end value is 200 and step size is 40. Therefore, the values we need to convert are 120, 120 + 40 = 160, and 160 + 40 = 200.
The formula for converting Fahrenheit to Celsius is:
Celsius Value = (5/9)*(Fahrenheit Value - 32)
Plugging 120 into the formula, the celsius value will be (5 / 9)*(120 - 32) => (5 / 9) * 88 => (5 * 88) / 9 => 440 / 9 => 48.88

But we'll only print 48 because we are only interested in the integral part of the value.

```
1.  void printTable(int start, int end, int step) {
2.      /* Don't write main().
3.       * Don't read input, it is passed as function argument.
4.       * Print output and don't return it.
5.       * Taking input is handled automatically.
6.       */
7.      int cf = start;
8.      while(cf <= end){
9.          int result = (5.0/9)*(cf-32);
10.         cout << cf << "\t" << result;
11.         cout<<endl;
12.         cf = cf + step;
13.     }
14.
15. }
```

6-Tut : Fibonacci Number

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Given a number N, figure out if it is a member of fibonacci series or not. Return true if the number is member of fibonacci series else false.

Fibonacci Series is defined by the recurrence

F(n) = F(n-1) + F(n-2)
where F(0) = 0 and F(1) = 1

Input Format : Integer N
Output Format : true or false
Constraints : 0 <= n <= 10^4
Sample Input 1 : 5
Sample Output 1 : true
Sample Input 2 : 14
Sample Output 2 : false

```
bool checkMember(int n){

    /* Don't write main().
     * Don't read input, it is passed as function argument.
     * Return output and don't print it.
     * Taking input and printing output is handled automatically.
     */
     int f0 = 0, f1 = 1, f2 = 0;
      bool fib = false;

     while(f2 <= n){

        if(f2 == n){
            fib = true;
            break;
        }

        f2 = f0 +f1;
        f0 = f1;
        f1 = f2;
     }

    return fib;
}
```

7-Tut : Check the error

Send Feedback

Will the following code generate any error ?

```
#include <iostream>
using namespace std;
void func(int a) {
    int b = a;
    b = b + 10;
}

int main() {
    int a = 10;
    func(a);
    cout << b << endl;
```

```
}
```

Options

This problem has only one correct answer

Yes
No

Correct Answer : A

8-Tut : Check the error

Send Feedback

Will the following code generate any error ?

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

void func(int a) {
   int b = 10;
   a = b + 10;
   cout << a << " ";
}

int main() {
   int a = 10;
   func(a);
   cout << a << " ";
}
```

Options

This problem has only one correct answer

Yes
No

Correct Answer : B

9-Tut : Fill the output

Send Feedback

What will be the output of the following code ?

```
void doubleValue(int a) {
   a = a * 2;
}
int main() {
   int a = 8;
   doubleValue(a);
   cout << a;

}
```

Answer

Type here : 8

Correct Answer

10-Tut : Fill the output

Send Feedback

What will be the output of the following code ?

```
int func(int a){
    a += 10;
    return a;
}
int main() {
    int a = 5;
    func(a);
    cout << a;

}
```

Answer

Type here : 5

Note : why not give errors if we are not storing returned values ?

https://stackoverflow.com/questions/28142017/what-happens-when-i-call-a-function-without-assigning-its-returned-value-to-a-va

Correct Answer

11-Tut : Fill the output

Send Feedback

What will be the output of the following code ?

```
int square(int a){
    int ans = a * a;
    return ans;
}

int main() {
    int a = 4;
    a = square(a);
    cout << a;

}
```

Answer

Type here : 16

Correct Answer