



Faculty of AI

Course Title: Programming 1
(Rob_IS_Bio_DS)

Course Code: CS 102

Midterm Exam Fall(25_26)

Hi, Yasser. When you submit this form, the owner will see your name and email address.

Required

What will the output of the following code snippet?

```
for (int i = 10; i >= 7; i++)  
{  
    cout << i << " ";  
} (1 Point) 
```

10 11 12

7 8 9 10

10 11 12 13 ----- to infinity

10 9 8 7

How many times will this loop run?

```
for (int i=0; i<5; i+=2) { }? (0.5 Points) 
```

5

4

3

0

What is the result of 9 % 4 in C++? (0.5 Points)

2

1

0

Which of the following is a valid variable name in C++? (0.5 Points) 

1variable

_variable1

@var

variable-1

Which statement is used to make a decision in C++? (0.5 Points) 

loop

if

break

decide

What will the output of the following code snippet?

```
int A = 35;  
int B = 8;  
cout << !(A > 12 && B < 34)); (1 Point) 
```

1

True

False

0

What is the size of an bool typically in most C++ systems? (0.5 Points) 

1 byte

2 bytes

8 bytes

4 bytes

What will the output of the following code snippet?

```
int x= 5;
do {
    cout << --x << " ";
}
while (x >= 2); (1 Point) 
```

4 3 2

5 4 3 2 1

5 4 3 2

4 3 2 1

What is the error of the following code snippet?

```
int main()
{
int m = 4;
int i = M + 4;
int i = 3;
cout << i << endl;
return 0;
} (1 Point) 
```

The value of i must be double.

The value of m not defined

The data type of m is double

The data type and the value of M not defined

The output of the following code snippet is

```
int age = 30;
if ( age > 20)
    cout << ("very old");
else if (age > 25)
    cout << ("old");
```

else
cout << ("young"); (1 Point) □

young

very old

old

Error

What will be the output of the following C++ code?

int d = 75;
string grade = (d < 60) ? "Fail." : "Pass."
cout << grade; (1 Point) □

Fail.

Fail. : Pass.

Pass.

Error.

The output of the following code snippet is

int code = 2;
switch (code)
{ **case 1**:
cout << ("Hello.");
case 3:
cout << ("Good-bye.");
break;
default:
cout << ("Till we meet again.");
break;
} (1 Point) □

Good-bye

Hello

Till we meet again

Error

What will the following print?

```
for(int i=0; i<=3; i++) {  
if(i==1) break;  
cout << i << " "; } (1 Point) □
```

0 1

0

0 2 3

1

In the expression **int result = 3 * (++m)**, if **m is initially 4**, what is the value of **result** and **m** after execution? (1 Point) □

result = 15, m = 5

result = 12, m = 5

result = 15, m = 4

result = 12, m = 4

What is the correct way to declare a variable that can hold true or false? (0.5 Points) □

float var

int var

char var

bool var

What is the error of the following code snippet ?

Line 1: const int myNum = 15;

Line 2: myNum = 10; (0.5 Points) □

The value 15 in line 1 is different from value 10 in line 2

'myNum' is not a variable

Assignment a value to 'myNum' in line 2

No Error

What will the output of the following code snippet?

```
int i = 0;  
do {  
    cout << i << " "  
    i++;  
}  
while (i <= 5); (1 Point) □
```

0 1 2 3 4

0 1 2 3 4 5

0 1 2 3

1 2 3 4 5

What will the following print?

```
for(int j=1 ; j<=4; j++) {  
if(j==2) continue;  
cout << j << " "; } (1 Point) □
```

1 3 4

1 2

1 2 3 4

1

What is the correct syntax to initialize a variable **float pi** with value **3.14**? (0.5 Points) □

float pi = 3,14;

pi = float(3.14);

float pi = 3.14;

float pi('3.14');

What is the value of result produced by the following code? -

```
int result = 3 * 7 % 3 - 4 - 3 ; (1 Point) □
```

-4

-10

0

-7

What will the output of the following code snippet?

```
int sum = 0;
for (int i = 6 ; i < 9 ; ++i)
{
    if (i % 8 != 0) { sum += i; }
}
cout << sum ; (1 Point) □
```

32

8

13

22

What will the output of the following code snippet?

```
y = 12;
y++;
Cout << y ++; (0.5 Points) □
```

12

13

14

11

What will the output of the following code snippet?

```
for (int i = 4; i < 8; i += 2)
{
    cout << i << " ";
} (1 Point) □
```

4 5 6 7

4 6

4 5 6 7 8

4 6 8

What will the output of the following code snippet?

```
int x = 10.5;  
cout << "x = " << x;  
x = x + 5; (0.5 Points) 
```

x = 10.5

x = 15

x = 10

Error

What will the output of the following code snippet?

```
int x = 5;  
int y = 5;  
cout << (x > y); (0.5 Points) 
```

1

True

False

0

----- is a **step-by-step** procedure to perform a **specific task** in a finite time. It is written in **pseudo code** (a plan or initial draft of the code). (0.5 Points)

Algorithm

Program

Data Structure

All of the above