

CS 107: Computer Programming – Section 1 – College of Engineering
1433/1434: First Semester; Monday 27/12/1433; Duration: 30 minutes

Quiz 1 Solution ses, 2 pages)

Exercise 1 (3 points)

What is the output of the following codes?

1) (1 point)

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

int main() {
    int x = 11;
    int y = 3;
    int z = x / y;
    cout << "z = " << z << endl;
    return 0;
}
```

z = 3

2) (1 point)

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

int main() {
    int x = 11;
    int y = 3;
    int z;
    if (x > y) z = x - y;
    else z = y - x;
    cout << "z = " << z << endl;
    return 0;
}
```

z = 8

3) (1 point)

```
include <iostream>
using namespace std;

int main() {
    int n = 7;
    int i = 0;
    while (i < n) {
        if (i % 2 == 1) {
            n--;
            continue;
        }
        i++;
    }
    cout << "i = " << i << endl;
    return 0;
}
```

i = 1

Exercise 2 (2 points)

Write a C++ program that determines the smallest prime number greater than a given number **n**.

Example 1:

n = 24

29

Example 2:

n = 31

37

// Next Prime Number

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
    int n;
    int i;
    int j;

    cout << "n = ";
    cin >> n;
    i = n + 1;
    while (1) {
        j = 2;
        while (j < i) {
            if (i % j == 0) {
                break;
            }
            j++;
        }
        if (j == i) {
            cout << i << endl;
            break;
        }
        i++;
    }
    return 0;
}
```