

BIL 104E QUIZ 2 (Section B)

1) Given the following declarations:

```
int x = 3, y = 5, z = 7;
bool b1 = true, b2 = false, b3 = x == 3, b4 = y < 3;
evaluate the following Boolean expressions: (24)
```

- | | |
|------------------------------------|----------------------------------|
| (a) $x \geq y$ (F) | (d) $x > 0 \parallel x < 10$ (T) |
| (b) $x \leq y$ (T) | (e) $x < 0 \parallel x > 10$ (F) |
| (c) $x \geq 0 \ \&\& \ x < 10$ (T) | (f) $!b3$ (F) |
| (d) $x < 0 \ \&\& \ x < 10$ (F) | (g) $b1 \ \&\& \ b4$ (F) |

2) Consider the following section of C++ code:

```
// i, j, and k are ints
if (i < j) {
    if (j < k)
        i = j;
    else
        j = k;
}
else {
    if (j > k)
        j = i;
    else
        i = k;
}
cout << "i = " << i << " j = " << j << " k = " << k << endl;
```

$i=5, j=3, k=3$

$i=5, j=3, k=5$

$i=7, j=7, k=3$

What will the code print if the variables **i**, **j**, and **k** have the following values? (18)

- (a) **i** is 5, **j** is 7, and **k** is 3
- (b) **i** is 7, **j** is 3, and **k** is 5
- (c) **i** is 7, **j** is 5, and **k** is 3

3) Use a loop to rewrite the following code fragment so that it uses just one **cout** and one **endl**. (15)

```
cout << 1 << endl;
cout << 3 << endl;
cout << 5 << endl;
cout << 7 << endl;
cout << 9 << endl;
cout << 11 << endl;
cout << 13 << endl;
cout << 15 << endl;
```

for(int i=1; i<16; i+2)
cout<<i<<endl;

4) How many asterisks does the following code fragment print? (10)

```
int a = 0;
while (a < 10 ) {
    cout << "*";
    a++;
}
cout << endl;
```

10

5) Write a C++ program that allows the user to enter exactly twenty double-precision floating-point values. The program then prints the minimum, and maximum of the values entered. (33)

```
int main() {  
    double a, min, max  
    cout<<"Enter the first number: "  
    cin>>a;  
    min=a;  
    max=a;  
    for(int i=2;i<21;i++) {  
        cout<<"Enter the "<<i<<". Number:";  
        cin>>a;  
        if(a<min) min=a;  
        if(a>max) max =a;  
    }  
    Cout<<"Minimum : "<<min<<endl;  
    Cout<<"Maximum: "<<max<<endl;  
}
```