

Midterm Exam
COMP 125: Visual Information Processing

LUC username: _____

Full name: _____

Date: _____

For each of the following problems, answer to the best of your ability. Use legible penmanship and complete sentences where merited.

By signing your name above, you agree to the Loyola University Chicago academic honesty policy. This exam is closed-world (no notes, internet, books, neighbors, etc.).

1. Complete the following boolean logic expressions. Write whether the result is True or False.

a = 5

b = 10

c = -5

d = 0

t = true

f = false

a > b = _____

d >= a = _____

f == f = _____

t == 1 = _____

t > f = _____

t && t = _____

t && f = _____

f && f = _____

f || f = _____

t || f = _____

(t || f) && t = _____

(t && t) && t = _____

(f || f) || f = _____

(t || f) && f = _____

2. Consider the following code snippets. Write what the code outputs to the console, e.g.:

```
x = 5
if (x > 0) {
    print("A")
}
```

Outputs:

```
    A
else {
    print("B")
}
```

```
z = 500
if (z > 1000) {
    print("A")
}
```

Outputs:

```
else if (z > 25) && (z < 400) {
    print("B")
}
else {
    print("C")
}
```

```
for (i = 0; i < 10; i = i + 1){
    print(i)
}
```

Outputs:

```
for (i = 0; i < 10; i = i + 1){
    print(i * 2)
}
```

Outputs:

```
for (i = 0; i < 10; i = i + 1){
    if (i == 2) || (i == 5) {
        print(i * 10)
    }
}
```

Outputs:

```
    else {
        print(i)
    }
```

}

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5. Discuss how the move from large, purpose-built computers to mainframe computers allowed programmers, users, and computer administrators to become more specialized professions.

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6. Discuss supercomputers. You might consider discussing how users interact with them, how they scale, and their purpose compared to other types of computers.

[illegible]

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