

**Homework 8. Embedding Videos and Loops**

**CSCE 102-General Applications Programming**

**Sections 10,11,12 Spring 2020**

**Due Sunday April 12th, 2020**

**Directions. This assignment is to be completed individually. There are two pages.**

**I have posted 4 videos:**

**Mythbusters video on GPU vs CPU computing power!**

**TedTalk-The Hidden Network that makes the internet possible**

**TedTalk-How Computer memory works**

**TedTalk-Neuroscience, AI and the Future of Education**

**Pick two of the three TedTalks. Answer the following questions using complete sentences.**

**Choice 1.**

**Name of the Talk:**

**What technological advancement is the focus of this talk?**

**What disadvantages can be associated with this technology?**

**Choice 2.**

**Name of the Talk:**

**What technological advancement is the focus of this talk?**

**What disadvantages can be associated with this technology?**

**FOR LOOPS.** Answers the questions for each loop:

Loop 1.

```
for (step=0; step <5; step=step+1) {
    message = step + " points ";
}
```

1. What is the starting value of the for loop? \_\_\_\_\_
- 2; What is the step size to increment the loop? \_\_\_\_\_
3. When the loop exits,
  - a. what is the last value of **step**? \_\_\_\_\_
  - b. what is the last value of **message**? \_\_\_\_\_

Loop 2.

```
for (step=1; step <=5; step=step+1) {
    message = step + " points ";
}
```

1. What is the starting value of the for loop? \_\_\_\_\_
2. When the loop exits,
  - a. what is the last value of **step**? \_\_\_\_\_
  - b. what is the last value of **message**? \_\_\_\_\_

Loop 3.

```
for (step=50; step >=0; step=step-10) {
    message = step + " points";
}
```

1. What is the starting value of the for loop? \_\_\_\_\_
2. When the loop exits,
  - a. what is the last value of **step**? \_\_\_\_\_
  - b. what is the last value of **message**? \_\_\_\_\_

## Loop 1 Simulation

| step | message      | step+1  |
|------|--------------|---------|
| 0    | 0 points     | $0+1=1$ |
| 1    | 1 points     | $1+1=2$ |
| 2    | 2 points     | $2+1=3$ |
| 3    | 3 points     | $3+1=4$ |
| 4    | 4 points     | $4+1=5$ |
| 5    | No message!! | exit    |

**Loop 2 Simulation: Complete the table.**

[illegible]

**Loop 3 Simulation: Complete the table**

[illegible]