



Peer Instruction #3: Control Loops



How many times will the body of the following while loop execute?

```
int i = 0;
while (i <= 9) {
    i++;
}
```

- A. 9 times
- B. 10 times
- C. 11 times
- D. 12 times
- E. Will not compile!



What is the value of the variable `j` after the following code executes?

```
int i = 0;
while (i < 10) {
    i++;
}
int j = i;
```

- A. `j` is 9
- B. `j` is 10
- C. `j` is 11
- D. `j` is 12
- E. Will not compile!



What does the following code print for the value of i?

```
for(int i=0; i<=10;i++);
```

```
System.out.println("i is " + i);
```

A. i is 9

B. i is 10

C. i is 11

D. i is 12

E. Will not compile!



Which of the following correctly prints the string “I love java!”

String s = “I love java!”;

- A. `for (int i=1; i< s.length(); i++) { System.out.print(s.charAt(i)); }`
- B. `for (int i=1; i<= s.length(); ++i) { System.out.print(s.charAt(i)); }`
- C. `for (int i=0; i<= s.length(); i++) { System.out.print(s.charAt(i)); }`
- D. `for (int i=0; i< s.length(); ++i) { System.out.print(s.charAt(i)); }`
- E. None of the above



How many times will the body of the following 'do while' loop execute?

```
byte i = 0;  
do {  
    i++;  
} while(i < 0);
```

- A. 0 times
- B. 1 time
- C. 2 times
- D. 128 times
- E. Infinite loop!



How many times will the body of the following 'do while' loop execute?

```
byte i = 0;  
do {  
    i++;  
} while(i > 0);
```

- A. 0 times
- B. 1 time
- C. 2 times
- D. 128 times
- E. Infinite loop!



What is the value of the variable count at the end of the following code?

```
int count = 0;
char c = '@';
switch (c) {
    case '@': count--;
    case '&': count++;
}
```

- A. count is -1
- B. count is 0
- C. count is 1
- D. count is 2
- E. Will not compile