

Montgomery College, CMSC 203
Worksheet 2
Module 3

Objectives

- for Loop
- while Loop
- do while Loop
- Switch statement

Warm-up Questions - (String and relational operator)

1. Which of the following will correctly determine whether string str1 and str2 are equal (there maybe more than one answer) ?

- A) (str1 == str2)
- B) (str1.equals(str2))
- C) (str2.equals(str1))
- D) (str2 = str1)

2. Which of the following is a relational operator (there maybe more than one answer)?

- A) >
- B) ||
- C) ==
- D) //

Concept Questions

1. Convert the following if statements into a switch statement.

```
double discountRate;
char custType = 'B';
if(custType == 'A:){
    discountRate = .08;
else if(custType == 'B' || custType == 'C'){
    discountRate = .04;
else
    discountRate = 0.0;
```

2. What will be the value of count after the code is finished running?

```
int count = 0
for(int i = 0; i < 5; i++){
    int j = i;
    while(j < 5){
        count++;
        j++;
    }
}
```

3. What will be the output of this program?

```
for (int i = 1; i <= 6; i++) {
    for (int j = 1; j <= i; j++) {
        System.out.print("*");
    }
    System.out.println();
}
```

4. List all the possible outcomes of this switch statement:

```
switch(day)
{
    case 1:
        System.out.print("Monday");
    case 2:
        System.out.print("Tuesday");
    case 3:
        System.out.print("Wednesday");
    case 4:
        System.out.print("Thursday");
    case 5:
        System.out.print("Friday");
}
```

Programming Questions

1. Write a program to perform the following:
 - Infinitely prompt the user to enter a number until 0 is entered
 - Output the number on every iteration
 - If the user enters 0, exit the loop and output an exit message