

## Class 2

1.

- Create two int variables name X and Y.
- Print “BIG” if X is bigger than Y 3.  
Print “small” if X is smaller than Y.

2.

- Run a for loop 5 times.
- Print iteration number every time.

3.

- Create a switch case with the four cases.
- Create an int variable and initialize it with a number 1-4.
- Print the season name accordingly:

- 1 = summer
- 2 = winter
- 3 = fall
- 4 = spring

- Do the same using if-else statements

4.

- How many times will the following loop run?
- What will be printed last?

```
public class Loops {  
    public static void main(String[] args) {  
        int count = 1;  
        while (count < 11) {  
            System.out.println("Count is: " + count);  
            count++;  
        }  
    }  
}
```

5.

Write a program with the following:

1. int with your age.
  2. char with the first letter in your last name.
  3. double with the shekels dollar currency.
  4. boolean about if you flew abroad.
  5. String with your apartment number.
- Print all variables.
  - Convert the double variable to int, and print the result.
  - Convert your apartment number to an int and print result.

6.

Create a program which uses Scanner class with the following:

- ask user for his phone number
- print the words "phone number" and the phone number the user entered.

7.

Write a program with the following in main class:

- Method named printHello() that prints the word “hello”.
- Method named calculate() which adds 5+3.2 and prints the result.

8.

Write a program with the following:

- Method that receive your name as a String and prints it.
- Method that receive an integer, divide it by 2, and prints the result.

9.

Write a program with the following:

- Method that receive two numbers, add them, and return the sum.
- Method that receive two Strings, add space between them, and return one spaced string.

10.

Write a program with the following:

- Class Car with 2 methods:
  - “drive” - which will print the word “go”.
  - “stop” – which will print the word “finish”.
- In main class call both methods from Car class.

11.

What will be printed?

```
public class MyMain {  
    public static void main(String[] args) {  
        System.out.println(5 % 2 == 1 ? 20 : 30);  
    }  
}
```

12.

What's wrong with the below code?

```
public class MyMain {  
    public static void main(String[] args) {  
        while(1 > 0){  
            System.out.println("1");  
        }  
    }  
}
```

13.

What will be the output of the below program?

```
public class MyMain {  
    public static void main(String[] args) {  
        String a1 = "hello";  
        String a2 = "Hello";  
        System.out.println(a1.equals(a2));  
    }  
}
```

14.

Which condition option should I use (1 / 2):

```
public class MyMain {  
    public static void main(String[] args) {  
        int x = 1;  
        int y = 2;  
  
        // Option 1  
        if (x > 0) {  
            if (y > 0) {  
                System.out.println("Good");  
            }  
        }  
  
        // Option 2  
        if (x > 0 && y > 0) {  
            System.out.println("Good");  
        }  
    }  
}
```

## Challenges:

15.

Create a nested for loop (loop inside another loop) to create a pyramid shape:

```
#  
##  
###  
####  
#####
```

16.

Create a nested for loop to create X shape (width is 7, length is 7):

```
# #  
# #  
# #  
# #  
# #  
# #  
# #
```

17.

Write a program with the following:

- Method that gets an integer from the user (using Scanner class).
- Method that receive the integer from the first method, and computes the sum of the digits the integer (e.g. 25 = 7, 2+5=7)

18.

- Create a class **Dog** with the following:
  1. Int age.
  2. String name.
  3. Boolean happy.
- Instantiate Dog class from the main class.

19.

Write a switch case which will check an int variable value and prints:

- "A" if the int value is 1-3
- "B" if the int value us 4-6
- "C" if the int value us 7-10

\*\* Hint: use multilabel switch case.