Fakultas Ilmu Komputer, Universitas Indonesia
Dasar-Dasar Pemrograman 2
Worksheet 01 – 2023

1. Basic Java program development process consists of three main activities:
   (1)……………………………… (2)……………………………… (3)………………………………
   which are repeated as many times as needed.
   These activities can be made easy by using an ……………… such as IntelliJ
   IDEA.

2. ……………………………… is an unambiguous, executable, and terminating specification
   of a way to solve a problem.

3. ………………………………………… is the software that controls all computer machine
   activities, provides the user interface to the computer, and manages
   resources such as the CPU and memory.

4. Find the output of this program.

```java
public class Problem4 {
  public static void main( String[] arguments ) {
    int a = 6, b = -25, k = 0;
    char c = 68;
    System.out.println( a % b ); //print ........

    System.out.println( b % a ); //print ........

    System.out.println( (a>b) || (k++ <= 0) ); //print ........

    System.out.println( (a == b) && (++k > 1) ); //print ........

    System.out.println( "\u0063" + c + k); //print ..........
  }
}
```

5. Write a ***while*** statement for printing integers from 1 up to 9999999
   which are multiples of 3 or 5, such as 3, 5, 6, 9, 10, 12, 15, etc.

   Then write an equivalent ***for*** statement and ***do-while*** statement.

   Answer:

6. **A literal** is a constant value which can be assigned to a variable of certain type. Which of the following is **not** a literal?

   (A) class   (B) 25   (C) true   (D) 7.8

7. **Find the output of this program.**

```
public class Problem7 {

  public static void main(String[] args) {

    int i=2, j=7;

    switch(i++) {

      case 2: j++;

      case 3: j=j*50;

      case 4: i=i++; break;

      case 5: j=j+i;

      default: System.out.println("Very Cool!");

                j=j*5;

                i=i*2;

    }

    System.out.printf("i=%d j=%d\n",i,j);

  }

}
```

   Answer:

8. **a)** Write a switch statement, <u>using **break**</u>, that displays Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, if day is 0, 1, 2, 3, 4, 5, 6, respectively.
   b) Write a switch statement, <u>without **break**</u>, that displays Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, if day is 0, 1, 2, 3, 4, 5, 6, respectively.

9. Draw a memory diagram for the assignments: int abc = 123; int def = abc;

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