

Lab 6 – Class

Part A: Class

- Definition of objects of the same kind
- A template to define an object
- Consists of variables/attributes and functions/methods
- Example: Human class
 - Variables: name, age, height, weight
 - Functions: sleep(), eat(String food), drink(String beverage)
- Sample program:

```
1  package lab6;
2
3  class Human{//Human class
4      private String name;
5      Human(String name){//constructor with parameter String name
6          this.name = name;//assign value of "name" to global variable "name"
7      }
8
9      void eat(String food){//function "eat" with parameter String food
10         System.out.println(name+" is eating "+food);//
11     }
12     void drink(String beverage){//function "drink" with parameter String beverage
13         System.out.println(name+" is drinking "+beverage);
14     }
15 }
16
17 public class MainClass {
18     public static void main(String[] args){
19         Human june = new Human("June");
20         Human john = new Human("John");
21         Human jane = new Human("Jane");
22     }
23 }
```

- What will be the output from the statement below?

```
june.eat("burger");
john.eat("pizza");
jane.eat("fried noodle");
jane.drink("coffee");
june.drink("Pepsi");
john.drink("orange juice");
```

Part B: Exercise

1. Write a class called Square with following requirements:

- Variables: *length*
- functions *getPerimeter()* and *getArea()*

The square with length of 5:
Perimeter: 20
Area: 25

The square with length of 7:
Perimeter: 28
Area: 49