Course 3 – Sprint 2 – Objects and Constructors – Assessment 2

Fix the errors

# Predict the output of the below code

String str1 = "Fruit"; String str2 = "Fruit";

boolean result = str1.equals(str2); System.out.println(result);

# Predict the output of the below code snippet

String str1 = "fruits";

String str2 = "fruits are good";

int result = str1.compareTo(str2); System.out.println(result);

# Predict the output of the below code snippet

int a = 10; double b = 2.00;

char[] arr = {'a', 'b'};

System.out.println("Return Value : " + String.valueOf(a) ); System.out.println("Return Value : " + String.valueOf(b) );

# Will the below piece of code compile? Give reasons for your answer

class Person {

final long MAX\_AGE; Person(){

MAX\_AGE = 90;

}

}

1. You run a bookstore that sells all types of books on fiction, religion, adventure, cookbooks etc. written by different authors. The end of year sale is on and you wish to give a discount on books belonging to a certain genre. All fiction books are given a 25% discount.

# Identify the objects and behaviour in the above problem statement. Declare the attributes of the Objects Identified and use appropriate datatypes

1. **Find the error in the below code and rectify it for successful execution of the program.**

class Student{

public static int calculateTotal(int mark1,int mark2,int mark3)

{

return mark1+mark2+mark3;

}

public static void main(String[] args) {

static int total = Student.*calculateTotal*(88,99,80); System.*out*.println("The total marks : "+total);

}

}

# Write a no-argument constructor for the below Person class.

public class Person{ int age;

String name;

String address;

String phoneNumber; String email;

}

# Write a parameterized constructor for the class given below, also initialize an object of the class using the new keyword.

class Customer{ String name;

int age;

String [] addresses; long mobileNumber;

boolean isLoyaltyCustomer;

}

# Predict the output of the following code: \*

public static void main( String[] args )

{

String string1 = "Hello World"; System.*out*.println(string1.substring(1,5));

}

# Predict the output for the following code \*

public static void main(String[] args) { String str1 = "Java";

String str2 = "Programming"; String str3 = str1.concat(str2); System.*out*.println(str3);

}

# Which of the following statements are false for Local Variables: \*

* 1. Objects do not maintain copies of local variables. 2.Not Mandatory to provide initial values.

1. The variables are declared within a method but do not get any default values and must be initialized with a value before using them.
2. The scope is generally limited to a method and starts from the line they are declared. The scope ends within the block of code

# Which of the following statements are true for constructor in java? \*

* 1. The constructor must have the same name as the class name. 2.The constructors **are called only once** during object initialization. 3.They cannot be called explicitly like methods using the dot operator.

4.The variables declared in the class cannot be given any initial values inside the constructor.

# The following code is giving compile time error fix the compile time error \*

**in the given code:**

public class Employee

{

int salary; String name; int empId;

public void display(){ String designation;

System.*out*.println("salary is : " + salary); System.*out*.println("Name is : " + name); System.*out*.println("Emp Id is : " + empId); System.*out*.println("Designation is : " + designation);

}

public static void main(String[] args) { Employee employee = new Employee(); employee.display();

}

}

15. \*

public class Employee

{

int salary;

String name;

String designation; int empId;

Employee(){

}

public Employee(int salary, String name, String designation, int empId) { salary = salary;

name = name; designation = designation; empId = empId;

}

public void display(){ System.*out*.println("Name is : " + name); System.*out*.println("Salary is : " + salary); System.*out*.println("EmpId is : " + empId);

System.*out*.println("Designation is : " + designation);

}

public static void main(String[] args) {

Employee employee = new Employee(350000,"John","XYZ",1001); employee.display();

}

}

The above code is giving following output.

# Name is : null Salary is : 0 EmpId is : 0

**Designation is : null**

Fix the issue in the code to get following output

# Name is : John

**Salary is : 350000 EmpId is : 1001**

# Designation is : XYZ

16. **Is this a correct definition for the main method ?**

void static main(String args){

}