```
Github = tunacoklu
```

HW2

#### **Question 1- A**

double num1, int num2 = 0; // Invalid declaring because not same types double and int in the line.

#### Question 2 – D

Code doesn't compile beacause "chair" is not initialized. Must be started with value.

#### **Question 3 – B**

Java string is initialized to null.

More Information https://docs.oracle.com/javase/7/docs/api/java/lang/String.html

#### **Ouestion 4 – B**

All variable names must begin with a letter of the alphabet, an underscore, or (\_), or a dollar sign (\$). After the first initial letter, variable names may also contain letters and the digits 0 to 9. No spaces or special characters are allowed.

The name can be of any length, but don't get carried away. Remember that you will have to type this name. Uppercase characters are distinct from lowercase characters. Using ALL uppercase letters are primarily used to identify constant variables. Remember that variable names are case-sensitive.

You cannot use a java keyword (reserved word) for a variable name.

More Information https://mathbits.com/MathBits/Java/DataBasics/Namingrules.htm

```
int blue\_=10; // valid
int 2blue = 10; // not valid.
int blue\$=10; // valid
int Blue = 10; //valid
```

#### **Question 5 – B**

Conventions Java class name first letter begin with uppercase and next letters will be lowercase.

#### Question 6 - C

```
public String convert(int value) {
          return value.toString(); }
public String convert(Integer value) {
          return value.toString(); }
public String convert(Object value) {
          return value.toString(); }
```

First code doesn't compiling, included just only "int".

## **Question 7 – C**

```
int numa = 999; //valid
int numb = 9_9_9; //valid
int numc = _9_99; // non valid
```

## **Question 8 – ?**

#### Question 9 - C

Code doesn't compiling. Java give us error "integer cannot be resolved to a type".

#### **Question 10 - C**

The Java new keyword is used to create an instance of the class. In other words, it instantiates a class by allocating memory for a new object and returning a reference to that memory. We can also use the new keyword to create the array object.

NewExample obj=new NewExample();

It is used to create the object.

It allocates the memory at runtime.

All objects occupy memory in the heap area.

It invokes the object constructor.

It requires a single, postfix argument to call the constructor

More Information https://www.javatpoint.com/new-keyword-in-java

#### **Question 11 – D**

```
double d1 = 5f;
double d2 = 5.0;
float f1 = 5f;
float f2 = 5.0; // not valid
```

#### **Ouestion 12 – A**

```
Byte = 8 Bit, Char = 16 Bit, Float = 32 Bit, Double = 64 Bit
Byte < Char < Float < Double
```

#### Question 13 – D

Constructor, instance variables, method names all attributes is valid for class.

#### Question 14 – B

This question like be Question 1 > int and double writed same line. It's mean compier error.

## Question 15 - A

Code is haven't any main class. Not be initialized.

## Question 16 - A

int defaultValue;

System.out.println(defaultValue);

Int, double or short doesn't give us output 0;

## **Question 17 – ?**

#### **Question 18 - D**

String isn't is primitive types. For example int, double, float, boolean, char, byte ... is primitive.

#### **Question 19 - C**

Link 1 and Link 3 goes to null,

Link 2 first going to y and link3 going to y with together setNext compiled.

## Question 20 - C

Pi is decimal number. Double is can be stored Pi number.

## **Question 21 – B**

Int is primative declaring for Java. It musn't variable name.

#### **Question 22 – ?**

## Question 23 - C

First letter musn't be numerical.

## Question 24 - A

double, double will be compile this line.

#### **Question 25 – B**

Java "string" default value is null.

## Question 26 - C

Output "0" mean int, long or short. Double is decimally number.

## **Question 27 - ?**

## Question 28 - C

Java give us some error. Unresolved compilation problem: Cannot invoke byteValue() on the primitive type int

## Question 29 - C

TennisBall must be producing from new TennisBall;

#### Question 30 – A

Java identifier rules:

Every programming language has its own set of rules and conventions for the kinds of names that you're allowed to use, and the Java programming language is no different. The rules and conventions for naming your variables can be summarized as follows:

- Variable names are case-sensitive. A variable's name can be any legal identifier an unlimited-length sequence of Unicode letters and digits, beginning with a letter, the dollar sign "\$", or the underscore character "\_". The convention, however, is to always begin your variable names with a letter, not "\$" or "\_". Additionally, the dollar sign character, by convention, is never used at all. You may find some situations where autogenerated names will contain the dollar sign, but your variable names should always avoid using it. A similar convention exists for the underscore character; while it's technically legal to begin your variable's name with "\_", this practice is discouraged. White space is not permitted.
- Subsequent characters may be letters, digits, dollar signs, or underscore characters. Conventions (and common sense) apply to this rule as well. When choosing a name for your variables, use full words instead of cryptic abbreviations. Doing so will make your code easier to read and understand. In many cases it will also make your code self-documenting; fields named cadence, speed, and gear, for example, are much more intuitive than abbreviated versions, such as s, c, and g. Also keep in mind that the name you choose must not be a keyword or reserved word.
- If the name you choose consists of only one word, spell that word in all lowercase letters. If it consists of more than one word, capitalize the first letter of each subsequent word. The names gearRatio and currentGear are prime examples of this convention. If your variable stores a constant value, such as static final int NUM\_GEARS = 6, the convention changes slightly, capitalizing every letter and separating subsequent words with the underscore character. By convention, the underscore character is never used elsewhere.

More Information https://docs.oracle.com/javase/tutorial/java/nutsandbolts/variables.html

#### Question 31 - C

Char is letter and int is numerical. They don't be wrapper class.

#### **Question 32 – A**

String deneme = null; is valid declaring.

#### Question 33 - A

Primitive for example(int, long, short, boolean) must be first value is letter.

#### Question 34 - ?

#### **Question 35 – C**

fruit 2 and fruit 3 going to go garbage collection.

## **Question 36 – ?**

#### **Question 37 - B**

Code is writed on the Java and output is constructor.

#### **Question 38 - C**

Integer and String isn't primitives class. They can be stored null.

## **Question 39 – C**

Static would be instance or static method. Instance must be only instance method.

More Information <a href="https://www.quora.com/In-Java-whats-the-differnece-between-instance-method-and-static-method">https://www.quora.com/In-Java-whats-the-differnece-between-instance-method-and-static-method</a>

#### **Question 40 – B**

Java declaration rule is underscore mustn't be between decimal point and numerical number.

#### Question 41 – A

```
Byte = 8 Bit, Short= 16 Bit, Int = 32 Bit, long = 64 Bit
Byte < Short < Int > long

Question 42 - A

public class Q42 {
```

```
public String name;
public static void main(String[] meow) {
  Q42 cat = new Q42();
```

cat.name= "Sadie";}} //cat.name is valid

#### Question 43 – B

Code is compiled with Java then output is "play-play-"

#### **Question 44 – B**

public static void setBeakLength(Penguin p, int b) { p.beakLength=b; is valid.

#### **Ouestion 45 – A**

First blank and second blank filling by int.

#### **Question 46 – C**

Diana and zoe will be go to garbage.

## **Question 47 – C**

Public TennisBall() {} is valid declaration for public class TennisBall {}

# Question 48 – B

Code is compiled by Java then output is "play-play-"

# Question 49 - ?

# **Question 50 – C**

Code is compiled by Java then output is "aab"