**Assignment - 3**

**Section A:**

1. What is a variable in JAVA?

An object that holds a value and can be interacted with.

2. When does Type Casting happen automatically?

1. When we convert from higher datatype to lower datatype
2. When we convert from lower datatype to higher datatype.

Ans: ------ **A**

3. Which of the following datatype holds true and false values.

1. int
2. double
3. String
4. boolean

Ans: ------**D**

4. To assign a byte type to a short type we should use explicit typecasting.

1. TRUE
2. FALSE

Ans: ------**TRUE**

5. A float type should be explicitly casted to a double type when we assign double type to float type.

1. TRUE
2. FALSE

Ans: ------**FALSE**

6. Which of the following is not a primitive data type.

int

**String**

short

byte

float

double

boolean

long

Ans: ------**STRING**

**Section B:**

**Programming Exercises:**

1. Write a JAVA Program - Declare 5 variables and assign the following values and print out the variables on the console.

29

77.888

‘T’

3157555666

25000

2. Write a JAVA program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

number1 = 27;

number2 = 75;

3. Write a JAVA program to display the following pattern.

J a v v a

J a a v v a a

J J aaaaa V V aaaaa

JJ a a V a a

4. Write a JAVA program to print the area and perimeter of a circle.

Radius = 9.5

5. Write a JAVA program to print the area and perimeter of a rectangle.

Width = 11.5 Height = 13.5

**Deliverables:**

1. Download this file and fill the answers for section A and upload this document to your shared directory.
2. For section B, create and test your programs using Eclipse and Upload your program files for the programs1 to 5 to your shared directory.(**Note: Only .java file for each program**)

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