

Date: 30/03/2020

Computer Applications worksheet 2 for current class IX students

Q1. Do as directed: (Write the solutions on a fullscape sheet and file it in a folder)

1. Give the output of the following program segment:

```
double x = 2.9, y = 2.5;  
System.out.println(Math.min(Math.floor(x),y));  
System.out.println(Math.max(Math.ceil(x),y));
```

2. State the output of the following segment:

```
String s = "Examination";  
int n = s.length();  
System.out.println(s.startsWith(s.substring(5,n)));  
System.out.println(s.charAt(2)==s.charAt(6));
```

3. Give the output of:

```
double b = -15.6;  
double a = Math.rint(Math.abs(b));  
System.out.println("a=" +a);
```

4. State the method that:

Determines if the specified character is an uppercase character.

To take out one character at a particular position of a string.

5. Write Java statements to perform the following tasks on strings:

- i. Initialize a variable city to store "PUNE"
- ii. Accept the address from the user (3 to 4 words)
- iii. Print the number of characters in the above address
- iv. Concatenate city with the address and store in String PostalAddress
- v. Extract 10 characters from 1st to 10th character of PostalAddress
- vi. Extract the last character of PostalAddress
- vii. Compare city with "DELHI" and store the result in check
- viii. Reverse a string "SUN MICROSYSTEMS"
- ix. Replace all occurrences of vowels in a string with "#"
- x. Convert a character ch to (a) lowercase (b)uppercase

6. Give one example for each of the following:

- a) Time delay loop b) Infinite loop c) Empty loop

7. Write a program to input a string and convert it into uppercase and print the pair of vowels and number of pair of vowels occurring in the string.

Example:

Sample input: "BEAUTIFUL BEAUTIES"

Sample output: Pair of vowels: EA, AU, EA, AU, IE

Number of pair of vowels: 5

8. Write a program to check if the number entered is a Disarium number or not.

(A number is called Disarium if sum of its digits powered with their respective position is equal to the original number. Ex. 135 is a disarium number.

Working: $1^1 + 3^2 + 5^3 = 135$, some other Disarium numbers are 89, 175, 518 etc)