Strings in Java

Assignment Questions

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1. **Write a simple String program to take input from user**

   Ans :

```java
import java.util.Scanner;
public class Simple {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the string type of data:");
        String result = scan.nextLine();
        System.out.println("You entered: " + result);
        scan.close();
    }
}
```

   Output :

   Enter the string type of data:
   varshab
   You entered: varshab

2. **How do you concatenate two strings in Java? Give an example ?**

   Ans :

- **In Java, you can concatenate two strings using the + operator or the concat() method. Both methods produce the same result, which is the combination of the two strings into a single string.**

   Ex : using + operator

```java
public class Concatenation {
    public static void main (String[]args){
        String name = "varshab";
        String name1 = " chandel";
        String result = name + name1;
        System.out.println(result);
    }
}
```

Output :

```
varshab chandel
```

Ex : using concat () method

```java
public class Concatenation {
    public static void main (String[]args){
        String name = "varshab";
        String name1 = " chandel";
        String result = name.concat(name1);
        System.out.println(result);
    }
}
```

Output :

```
varshab chandel
```

3. **How do you find the length of a string in Java Explain with an example ?**

Ans :

- **In Java, you can find the length of a string using the length() method of the String class. The length() method returns an integer representing the number of characters in the string, including spaces and special characters.**

Ex :

```
public class LengthOfString {
public static void main (String[] args){
        String name = "varshab";
        System.out.println (name.length());
    }
}
```

Output :

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- **In the above example the name.length () method gives the number of characters present inside the string name.**

4. How do you compare two strings in Java? Give an Example

Ans :

a. == operator :

- **The == operator is used to compare the referances of the string that is the address that is the address that is stored by the string name.**
- **It returns true if the references of the string are the same and returns false if the references of the string are not equal.**

Ex : Using == operator

```
public class Compare {
    public static void main (String[]args){
        String s1 = "varshab";
        String s2 = "chandel";
        String s3 = "varshab";
        System.out.println(s1==s2);
        System.out.println(s2==s3);
        System.out.println(s1==s3);
    }
}
```

Output :
false
false
true

b. **Using equals () method :**

- **The equals () method compares the string which is held by the two strings. If these are equal then it returns true, if it is not equal it returns false, it only returns the boolean value.**

Ex :

```
public class Compare {
    public static void main (String[]args){
        String s1 = "varshab";
        String s2 = new String ("varshab");
        System.out.println(s1.equals(s2));
    }
}
```

Output :

true

5. **Write a program to find the length of the string "refrigerator".**

Ans :

```
public class Refrigerator {
    public static void main (String[] args){
        String name = "refrigerator";
        System.out.println(name.length());
    }
}
```

Output :

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6. **Write a program to check if the letter 'e' is present in the word 'Umbrella'.**

Ans :

```
public class Check {
    public static void main (String[]args){
       String name = "Umbrella";
       String letter = "e";
       int result = name.indexOf(letter);
```

```
        if (result >=0){
           System.out.println("letter " + letter + " is present at the
index number " + result + " in the word " + name);
        }
        else {
           System.out.println("letter " + letter + " is not present in
the word " + name);
        }
       }
    }
```

Output :

```
    letter e is present at the index number 4 in the word Umbrella
```

7. **Write a program to delete all consonants from the string "Hello, have a good day".**

Ans :

```
    public class Alphabet {
        public static void main (String[]args){
          String sentence = "Hello, have a good day";
          String key = "aeiou,";
          for (int i=0; i<sentence.length(); i++){
          char result = sentence.charAt(i);
          int ans = key.indexOf(result);
          if (ans >= 0){
            System.out.print (result);
          }
          else {
            System.out.print (" ");
          }
          }
        }
      }
```

Output :

```
e  o,  a e a  oo   a
```