String

Materi 8

Konsep Pemrograman

PS Sistem Informasi FMIPA

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Standar Kompetensi

1. Mahasiswa memahami konsep string
2. Mahasiswa mampu menerapkan dalam pemrograman

Materi

1. Konstruksi String
2. String Methods
3. Komparasi String
4. Lokasi Karakter dan Substring
5. Ekstraksi Substring dari Strings
6. Menggabung String

Konstruksi String

- String di java direpresentasikan dengan class bukan array character seperti C dan C++
- Terdapat dua class:
  - Class **`java.lang.String`** ☾ `string konstan (`*`immutable`*`)`
  - Class **`java.lang.StringBuffer`** ☾ `string` *`mutable`*

String Mutable (dapat dimodifikasi)

- Menggunakan **StringBuffer** dan **StringBuilder**
- Pertimbangan:
  - StringBuilder **:** lebih cepat tapi tidak bisa disinkronisasi
  - StringBuffer **:** `thread safety (recommended)`

StringBuffer (append() method)

```
public class Test {
public static void main(String args[]) {
StringBuffer sb = new StringBuffer("Test");
sb.append(" String Buffer");
System.out.println(sb);
}
}
```

StringBuffer (reverse() method)

```
public class Test {
public static void main(String args[]) {
StringBuffer buffer = new StringBuffer("Game Plan");
buffer.reverse();
System.out.println(buffer);
}
}
```

StringBuffer (delete() method)

```
public class Test {
public static void main(String args[]) {
StringBuffer sb = new StringBuffer("abcdefghijk");
sb.delete(3,7);
System.out.println(sb);
}
}
```

StringBuffer (insert() method)

```
public class Test {
public static void main(String args[]) {
StringBuffer sb = new StringBuffer("abcdefghijk");
sb.insert(3,"123");
System.out.println(sb);
}
}
```

StringBuffer (replace() method)

```
public class Test {
public static void main(String args[]) {
StringBuffer sb = new StringBuffer("abcdefghijk");
sb.replace(3, 8, "ZARA");
System.out.println(sb);
}
}
```

StringBuffer (length() method)

```
public class StringDemo {
public static void main(String args[]) {
String palindrome = "Dot saw I was Tod";
int len = palindrome.length();
System.out.println( "String Length is : " + len );
}
}
```

StringBuffer (concat() method)

```
public class StringDemo {
public static void main(String args[]) {
String string1 = "saw I was ";
System.out.println("Dot " + string1 + "Tod");
}
}
```

Latihan

1.

Output :

```
String 1: PHP Exercises and

String 2: Python Exercises

The concatenated string: PHP Exercises and Python
Exercises
```

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2.

Output :

```
Original string:
abcdefabcdeabcdaaa

Second string:
bcdefbcdebcd
```

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3.

Output :

```
The given string is: zebrazone
The new string is: zebraone
```

Sekian dan Terimakasih