

# Java - Introduction to Programming

## Lecture 13

### String Builder

#### Declaration

```
StringBuilder sb = new StringBuilder("Apna College");  
System.out.println(sb);
```

#### Get A Character from Index

```
StringBuilder sb = new StringBuilder("Tony");  
//Set Char  
System.out.println(sb.charAt(0));
```

#### Set a Character at Index

```
StringBuilder sb = new StringBuilder("Tony");  
//Get Char  
sb.setCharAt(0, 'P');  
System.out.println(sb);
```

#### Insert a Character at Some Index

```
import java.util.*;  
  
public class Strings {  
    public static void main(String args[]) {  
        StringBuilder sb = new StringBuilder("tony");  
        //Insert char  
        sb.insert(0, 'S');  
        System.out.println(sb);  
    }  
}
```

## Delete char at some Index

```
import java.util.*;

public class Strings {
    public static void main(String args[]) {
        StringBuilder sb = new StringBuilder("tony");
        //Insert char
        sb.insert(0, 'S');
        System.out.println(sb);

        //delete char
        sb.delete(0, 1);
        System.out.println(sb);
    }
}
```

## Append a char

Append means to add something at the end.

```
import java.util.*;

public class Strings {
    public static void main(String args[]) {
        StringBuilder sb = new StringBuilder("Tony");
        sb.append(" Stark");
        System.out.println(sb);
    }
}
```

## Print Length of String

```
import java.util.*;

public class Strings {
    public static void main(String args[]) {
        StringBuilder sb = new StringBuilder("Tony");
        sb.append(" Stark");
        System.out.println(sb);

        System.out.println(sb.length());
    }
}
```

## Reverse a String (using StringBuilder class)

```
import java.util.*;

public class Strings {
    public static void main(String args[]) {
        StringBuilder sb = new StringBuilder("HelloWorld");

        for(int i=0; i<sb.length()/2; i++) {
            int front = i;
            int back = sb.length() - i - 1;

            char frontChar = sb.charAt(front);
            char backChar = sb.charAt(back);

            sb.setCharAt(front, backChar);
            sb.setCharAt(back, frontChar);
        }

        System.out.println(sb);
    }
}
```

## Homework Problems

Try Solving all the String questions with StringBuilder.