

# Python for Beginners – Class 4 Notes

## Repeating strings

```
print(string * number)
print("hi" * 6) -> hihihihihih
```

## Joining strings

```
print("hi" + "bye") -> hibye
print ("hi", "bye") -> hi bye

text = "I love "
text = text + "tacos"
print (text) -> I love tacos
```

## Length of string

- len ("blah") -> 4
- len ("hello world") -> 11

## Selecting parts of a string

- **ONE character**
  - `str[index]`
  - index starts at 0

```
word = "ice cream"
      012345678
word[2] -> "e"
word [9] -> error
word [7] -> "a"
```
- **ONE character starting from end**
  - `str[-num]`
    - -1 is last character (starts from 1, not 0 – different from indexes)

```
word = "ice cream"
      012345678
word[-4] -> "r"
word [-9] -> "i"
word [-10] -> error
```

- **From index to index**

- **str[start:end]**

- INCLUDES start index, EXCLUDES end index

```
word = "ice cream"
      012345678
word[4:6] -> "cr"
word [1:6] -> "ce cr"
word [4:4] -> blank
word[4:100] -> "cream"
```

- **From index to end**

- **str[start:]** - includes start index

```
word = "ice cream"
      012345678
word[5:] -> "ream"
word[2:] -> "e cream"
```

- **From start to index**

- **str[:end]** - doesn't include end index

```
word = "ice cream"
      012345678
word[:3] -> "ice"
word[:7] -> "ice cre"
```

## Looping Through a String

You can use the **length of the string** to **loop through** each character in the string.

For example:

```
text = "happy birthday"
```

```
for i in range (0, len(text)):
    print (text[i])
```

Using a **for loop** with the range from 0 to the **length of the text**, you can print out each character one-by-one (on separate lines) by printing the character at the current index.