Leaders' School & College Chattogram

Class: IX (Bangla Version)

L#02

Topic Name: Escape Sequences, Variables and Data Types

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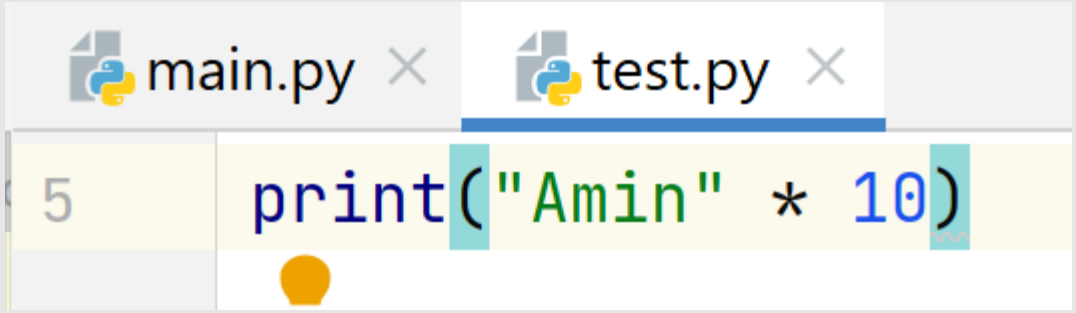
More About print()

- 10x Print Your Name: Simple Solution!



- Output:

```
AminAminAminAminAminAminAminAminAminAmin
```

Escape Sequences

- Escape sequences allow you to insert special characters in strings.
- Put a backslash (\) before the character you want to escape.
- \n: Newline
- \t: Tab
- \": Double Quote
- 10x Print Your Name: Simple Solution!

```
print("Amin \t" * 10)
```

- Output:

```
Amin    Amin    Amin    Amin    Amin    Amin    Amin    Amin    Amin    Amin
```

Escape Sequences: New Line

- 10x Print Your Name: Simple Solution!

```
print("Amin \n" * 10)
```

- Output:

```
Amin
Amin
Amin
Amin
Amin
Amin
...

...
```

Comments on Python

- Used to include explanatory or descriptive text within the code that is not executed as part of the program
- They are intended to provide additional information to readers and developers of the code.
- Single Line Comments: Start with #

```
# This is a single-line comment
```

- Multi-line Comments:

```
"""
This is a multi-line comment.
It spans across multiple lines.
"""
```

Variables

- Variables are used to store values in memory
- Python does not require you to explicitly declare the data type of a variable.
- When you assign a value to a variable, Python automatically assigns a data type based on the value.

  You can assign a value to a variable using the assignment operator (=).

  The general syntax is:

variable_name = value

```
message = "Hello, world!"
```

Variables: Some Rules to Follow

- Variable names must start with a letter or underscore (_), but not with a number.
- Variable names can only contain letters, numbers, and underscores.
- Variable names are case sensitive. For example, "myVar" and "myvar" are two different variables.
- You cannot use reserved keywords as variable names, such as "if," "while," "for," "and," "or," "not," and "else.“
- It's a good practice to use descriptive and meaningful variable names, so it's easy to understand the purpose of the variable.

Variables: Some Rules to Follow

```
my_var = 5
myVar = 6
_myvar = 7
1var = 5 # variable name cannot start with a number
my-var = 6 # variable name cannot contain hyphen
if = 7 # variable name cannot be a reserved keyword
```

Data Types

- Integer: Whole numbers without decimals (e.g., 5, -10).
- Float: Real numbers with decimals (e.g., 3.14, -2.5).
- String: A sequence of characters (e.g., "Hello", 'Python').
- Boolean: Represents either True or False.

```
student_count = 1000  # Integer
grade = 3.69    # Float
is_passed = True    # Boolean
course_name = "Python Programming"  # String
print(student_count)
print(grade)
print(is_passed)
print(course_name)
```

Check Data Type

- type(): function is used to determine the type of an object.

```
student_count = 1000  # Integer
grade = 3.69     # Float
is_passed = True     # Boolean
course_name = "Python Programming"  # String
print(type(student_count))
print(type(grade))
print(type(is_passed))
print(type(course_name))
```

Q/A Session