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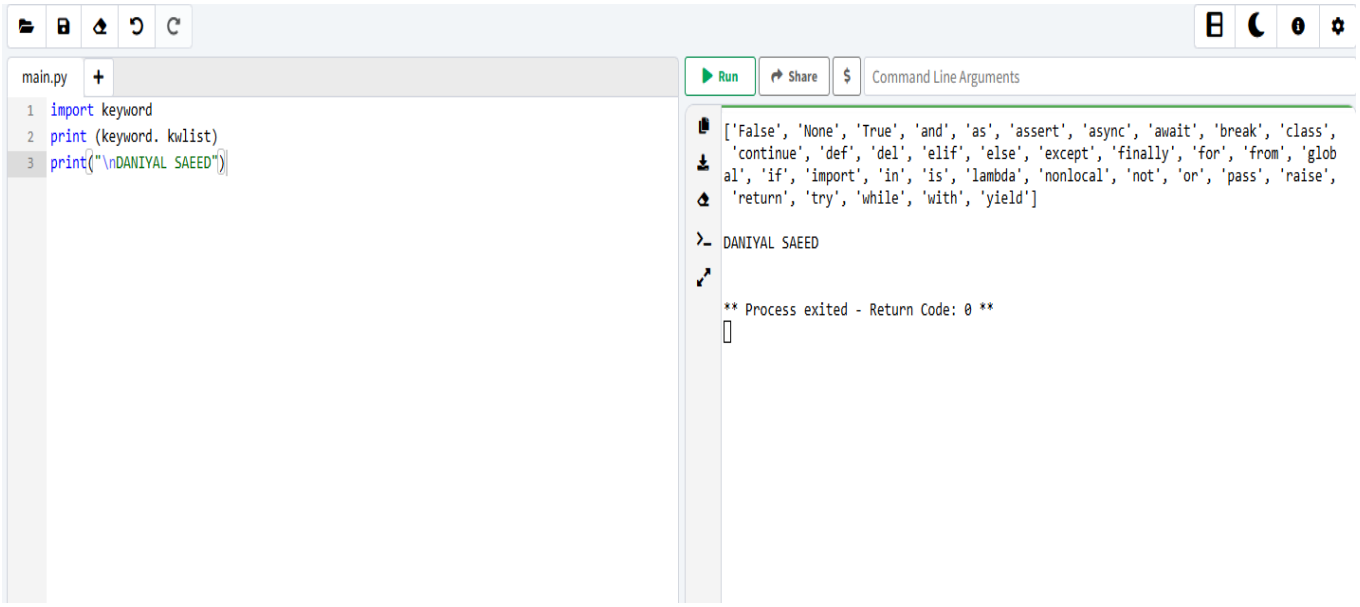
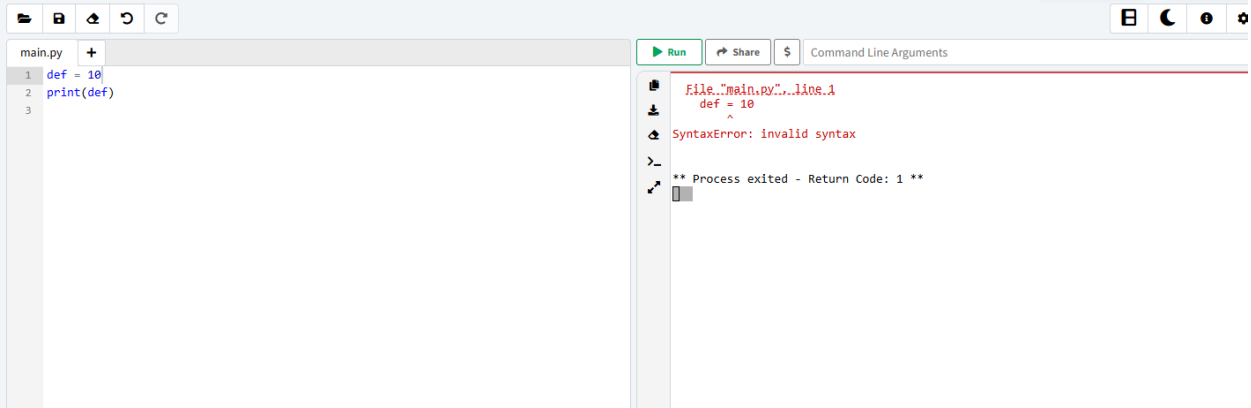
ASSIGNMENT NO 1

Keywords Exploration:

- Write a Python program to display all reserved keywords using keyword.kwlist.



- Try to use one keyword as a variable name and observe what happens. Explain the error.



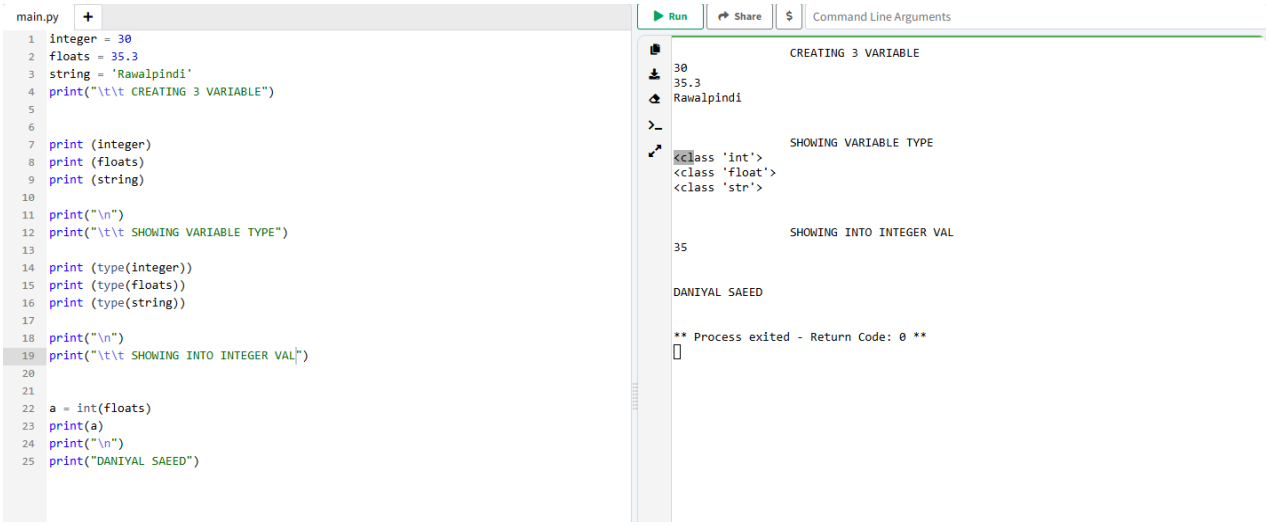
- **Keywords** in Python are reserved words that have special meaning in the language (like `def`, `if`, `else`, `for`, `while`, etc.).

- You **cannot** use these keywords as variable names because Python uses them to understand the structure and flow of the code.

- Using a keyword as a variable name confuses the Python interpreter, so it raises a syntax error.

2. Working with Data Types:

- Create three variables: an integer, a float, and a string.
- Print their values and use the type() function to show their data types.
- Convert the float into an integer and print the result.



```
integer = 30
floats = 35.3
string = 'Rawalpindi'
print("\t\t CREATING 3 VARIABLE")


print (integer)
print (floats)
print (string)

print("\n")
print("\t\t SHOWING VARIABLE TYPE")

print (type(integer))
print (type(floats))
print (type(string))

print("\n")
print("\t\t SHOWING INTO INTEGER VAL")


a = int(floats)
print(a)
print("\n")
print("DANIYAL SAEED")
```

```
                CREATING 3 VARIABLE
30
35.3
Rawalpindi


                SHOWING VARIABLE TYPE
<class 'int'>
<class 'float'>
<class 'str'>


                SHOWING INTO INTEGER VAL
35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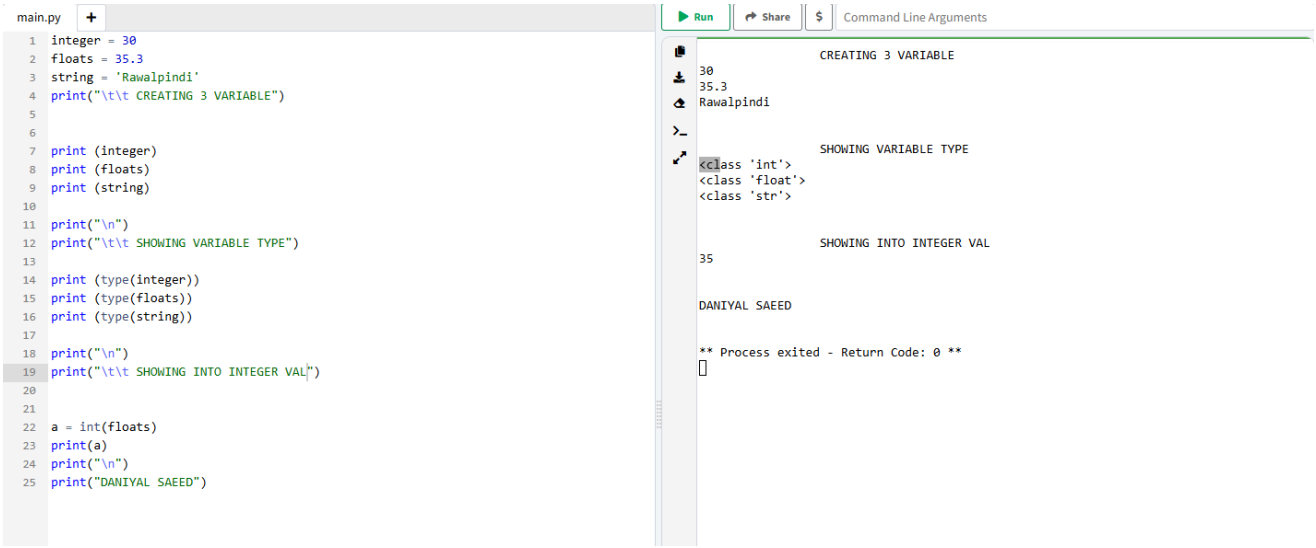
** Process exited - Return Code: 0 **
```

3. Escape Sequences in Strings

- Write a program that demonstrates at least four escape sequences:
- Newline (\n)
- Tab (\t)
- Double quotes inside a string (\")
- Backslash (\\)
- Print the results and explain the formatting changes.



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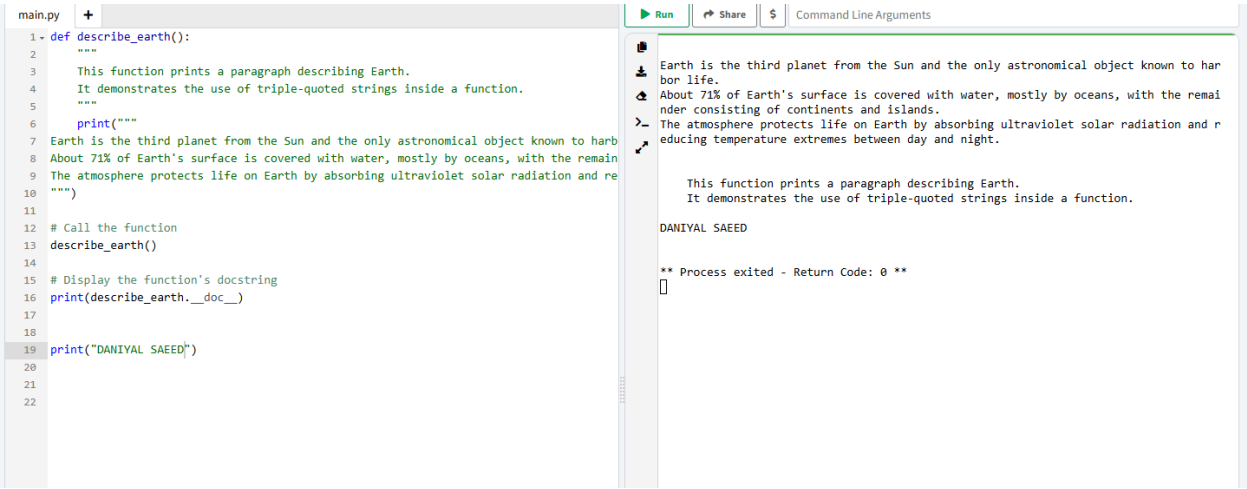
** Process exited - Return Code: 0 **
```

4. Triple-Quoted Strings & Docstrings

- Write a function with a docstring that explains what the function does.
- Inside the function, use a triple-quoted string to print a paragraph spanning multiple lines.
- Call the function and display both its output and its._doc_.



5. Perform DMAS Operations

- Create two integer variables, a 15 and b = 4
- Perform and print the results of:
- D (Division) → a / b (floating-point division) and a // b (integer division)
- M (Multiplication) a b
- A (Addition) -a + b
- S (Subtraction) → a b

main.py

```python
a = 15
b = 4

# Division
float_division = a / b       # floating-point division
int_division = a // b        # integer division

# Multiplication
multiplication = a * b

# Addition
addition = a + b

# Subtraction
subtraction = a - b

# Print results
print("Division (float):", float_division)
print("Division (int):", int_division)
print("Multiplication:", multiplication)
print("Addition:", addition)
print("Subtraction:", subtraction)



print("DANIYAL SAEED")
```

Run | Share | $ | Command Line Arguments

```
Division (float): 3.75
Division (int): 3
Multiplication: 60
Addition: 19
Subtraction: 11
DANIYAL SAEED

** Process exited - Return Code: 0 **
```