Python Fundamentals

Exercise 1

Write Python code that prints your name, student number and email address.

An example runs of the program:

Bob

ST1001

bob@gmail.com

```
# Q1
print("Bob")
print("ST1001")
print("bob@gmail.com")
```

```
G:\ML\Python\Project1\.ver
Bob
ST1001
bob@gmail.com
```

Exercise 2

Write Python code that prints your name, student number and email address using escape sequences.

An example runs of the program:

Bob

ST1001

bob@gmail.com

```
#Q2
print("Bob\nST1001\nbob@gmail.com")
```

```
G:\ML\Python\Project1\.venv\Scripts\py
Bob
ST1001
bob@gmail.com
```

Exercise 3

Write Python code that add, subtract, multiply and divide the two numbers. You can use the two numbers 14 and 7. An example run of the program:

14 + 7 = 21

14 * 7 = 98

14 – 7 = 7

14 / 7 = 2

```python
#Q3
num1 = 14
num2 = 7
print(f"{num1} + {num2} = {num1 + num2}")
print(f"{num1} - {num2} = {num1 - num2}")
print(f"{num1} * {num2} = {num1 * num2}")
print(f"{num1} / {num2} = {num1 / num2}")
```

```
14 + 7 = 21
14 - 7 = 7
14 * 7 = 98
14 / 7 = 2.0
```

Exercise 4

Write Python code that displays the numbers from 1 to 5 as steps.

An example runs of the program:

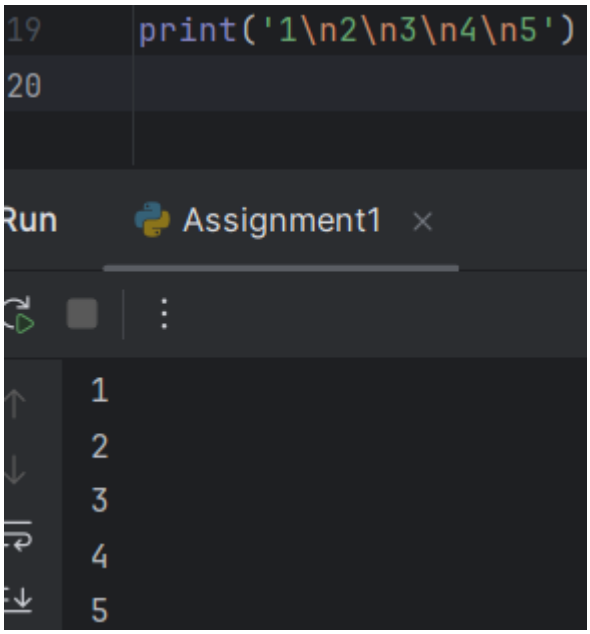
1

2

3

4

5



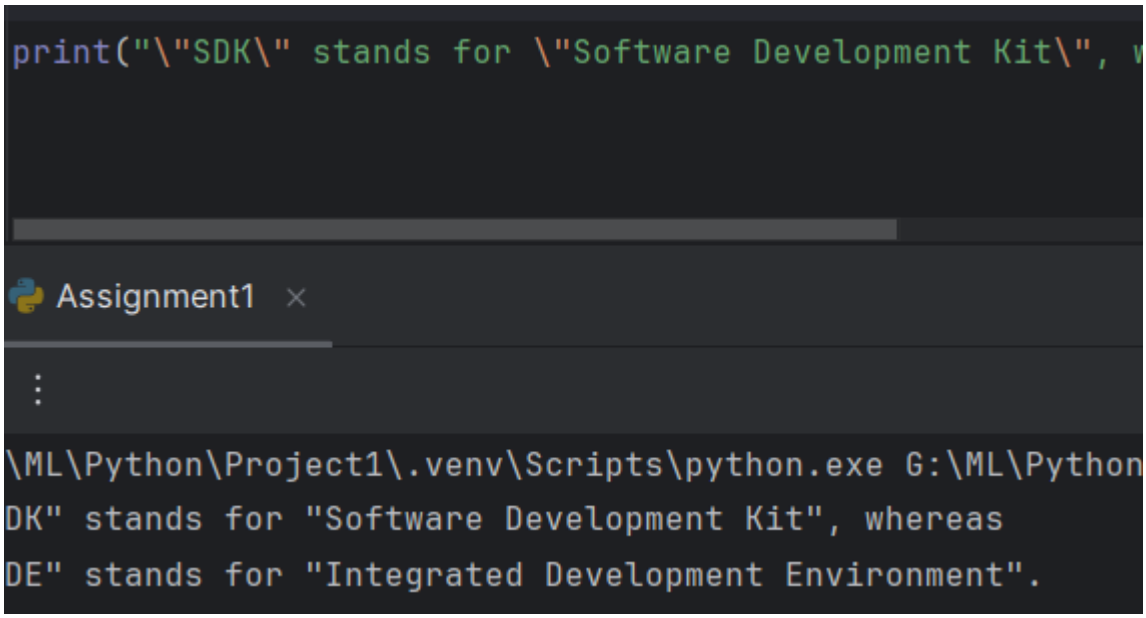
Exercise 5

Write Python code that outputs the following sentence (including the quotation marks and line break) to the screen:

An example runs of the program:

"SDK" stands for "Software Development Kit", whereas

"IDE" stands for "Integrated Development Environment".



Exercise 6

Practice and check the output

print("python is an \"awesome\" language.")

print("python\n\t2023")

print('I\'m from Entri.\b')

print("\65")

print("\x65")

print("Entri", "2023", sep="\n")

print("Entri", "2023", sep="\b")

print("Entri", "2023", sep="*", end="\b\b\b\b")

```python
#Q6

print("python is an \"awesome\" language.")
print("python\n\t2023")
print('I\'m from Entri.\b')
print("\65")
print("\x65")
print("Entri", "2023", sep="\n")
print("Entri", "2023", sep="\b")
print("Entri", "2023", sep="*", end="\b\b\b\b")
```

```
python is an "awesome" language.
python
    2023
I'm from Entri
5
e
Entri
2023
Entr2023
Entri*
```

Exercise 7

Define the variables below. Print the types of each variable. What is the sum of your variables? (Hint: use a type conversion function.) What datatype is the sum?

num=23

textnum="57"

decimal=98.3

```python
#Q7
num = 23
textnum = "57"
decimal = 98.3
print(type(num))
print(type(textnum))
print(type(decimal))
total = num + int(textnum) + decimal
print(f"Sum: {total}")
print(f"Type of sum: {type(total)}")
```

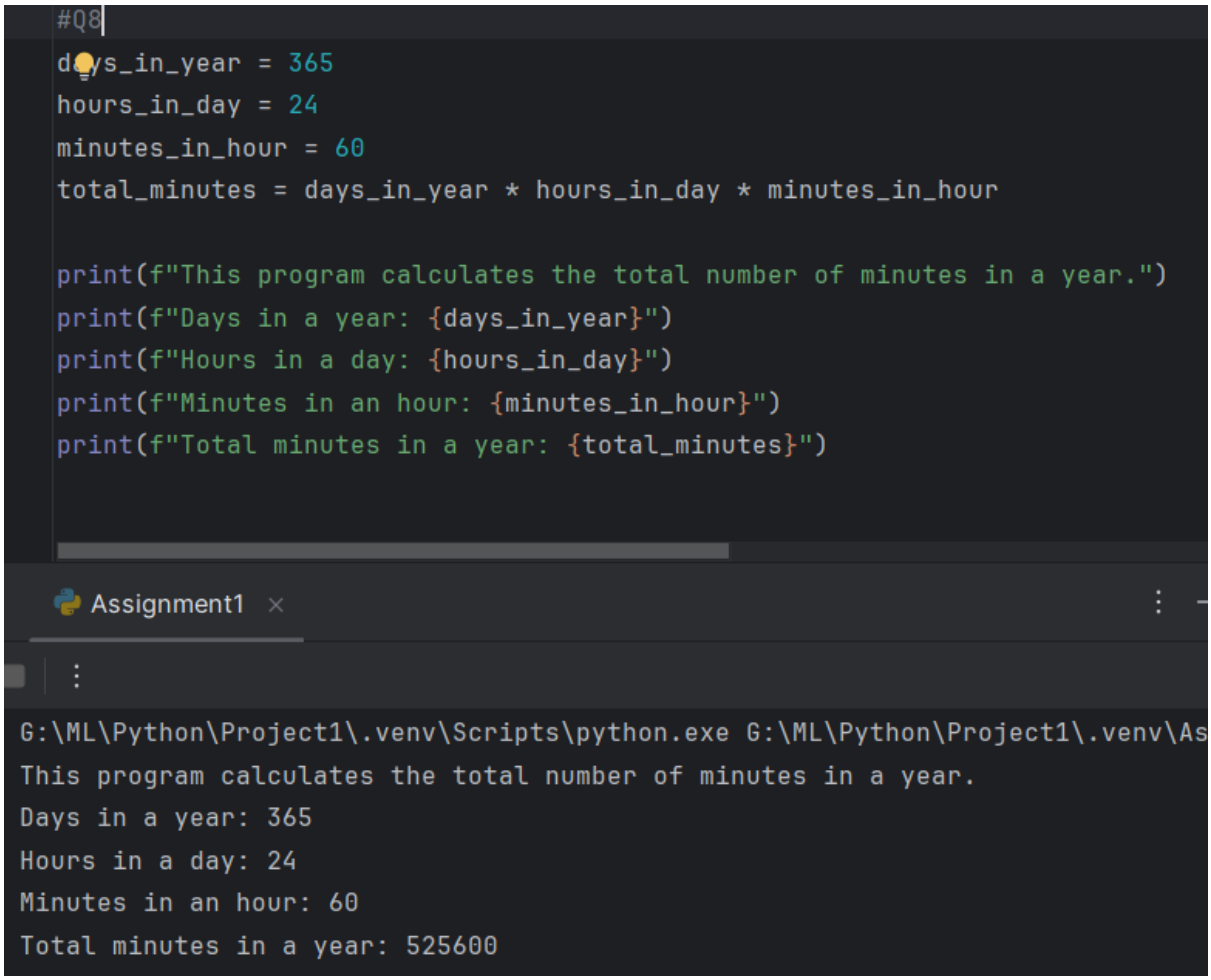
Assignment1

```
G:\ML\Python\Project1\.venv\Scripts\python.e
<class 'int'>
<class 'str'>
<class 'float'>
Sum: 178.3
Type of sum: <class 'float'>
```

Exercise 8

calculate the number of minutes in a year using variables for each unit of time. print a statement that describes what your code does also. Create three variables to store no of days in a year, minute in a hour, hours in a day, then calculate the total minutes in a year and print the values

(hint) total number of minutes in an year =No.of days in an year * Hours in a day * Minutes in an hour



Exercise 9

Write Python code that asks the user to enter his/her name and then output/prints his/her name with a greeting.

An example runs of the program:

Please enter you name: Tony

Hi Tony, welcome to Python programming :)

```
#Q9
name = input("Please enter your name: ")
print(f"Hi {name}, welcome to Python programming :)")
```

```
Please enter your name: chris
Hi chris, welcome to Python programming :)
```

Exercise 10

Name your file: PoundsToDollars.py

Write a program that asks the user to enter an amount in pounds (£) and the program calculates and converts an amount in dollar ($)

An example runs of the program:

Please enter amount in pounds: XXX

£ XXX are $ XXX

```
#Q10
pounds = float(input("Please enter amount in pounds: "))
conversion_rate = 1.25
dollars = pounds * conversion_rate
print(f"£{pounds} are ${dollars}")
```

```
Please enter amount in pounds: 100
£100.0 are $125.0
```