COMPSCE 111 / 111G

Mastering Cyberspace:
An introduction to practical computing

Programming with Python
Exercises

• What is the output produced by the following program:

```python
print("This", "is")
print("a program that has")
print(3, "lines")

print(1,2,3,4)
print("1,2,3,4")
print("1234", 1,2)
print("1",2,3,"4")
```

```
This is
a program that has
3 lines
1 2 3 4
1,2,3,4
1234 1 2
1 2 3 4
```
Exercises

```python
print(2 + 3)  # 5
print(3 - 4)  # -1
print(4 * 3)  # 12
print(3 / 2)  # 1.5
print(3 // 2)  # 1
print(2 ** 5)  # 32
print(7 % 3)  # 1
print(4 % 7)  # 4
```
Exercises

• What is the output produced the following program?

```python
print(1 + 2 + 3)
print("1" + "2" + "3")
print(1 * 2)
print("1" * 2)
```

<table>
<thead>
<tr>
<th>6</th>
<th>123</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>
Exercises

height = 10
width = 20
area = height * width
print("Area =", area)

age = 21
print("Age =", age)
age = age + 1
print("I am", age, "next year")
Exercises

• What is the output produced by the following program?

```python
a = 17
b = 5
print("a =", a)
print("b =", b)
temp = a
a = b
b = temp
print("a =", a)
print("b =", b)
```
Exercise

• Write a program that converts a temperature from Fahrenheit to Celsius.

• The formula to convert from Fahrenheit to Celsius is:
  – Celsius = 5 / 9 * (Fahrenheit - 32)

• Sample output:

Please enter a temperature in Fahrenheit: 72

72 degrees Fahrenheit is equivalent to 22.2222222222222222 degrees Celsius
```python
fahrenheit = int(input("Please enter a temperature in Fahrenheit: "))
celsius = 5/9*(fahrenheit - 32)
print()
print(fahrenheit,"degrees Fahrenheit is equivalent to")
print(celsius,"degrees Celsius")
```