Introduction to Python

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**Homework Exercises: Operators and Conditionals**

1. **Fill out the table below with the values that will be printed to the terminal:**

| Command | 5 \*\* 3 | 4 + 1 \* 2 | (4 + 1) \* 2 | 22 // 13 | 11 - 3 + 8 |
| --- | --- | --- | --- | --- | --- |
| Returns | **125** | **6** | **10** | **1** | **16** |

1. **What does this program print?**

pressure = 71.9

if pressure > 50.0:

pressure = 25.0

elif pressure <= 50.0:

pressure = 0.0

print(pressure)

**25.0**

1. **What does the program below print?**

age = 14

genre = comedy

snacks = popcorn

valid\_genres = ['comedy', 'adventure', 'horror', 'drama', 'sci-fi']

if genre not in valid\_genres:

print("Unknown genre")

elif age < 13 and genre == 'horror':

print("Too scary for your age!")

elif genre in ['comedy', 'adventure'] and snacks == 'popcorn':

print("Sounds like a fun night!")

elif snacks == 'candy':

print("Don’t forget snacks!")

else:

print("Enjoy your movie!")

**Answer: NameError: name 'comedy' is not defined**

1. **Fill in the blanks in the below program**

guests = int(input("Enter number of guests: "))

slices\_per\_pizza = int(input("Enter slices per pizza: "))

slices\_per\_guest = int(input("Enter slices per guest: "))

total\_slices\_needed = **guests** \* **slices\_per\_guest**

pizzas\_needed = (total\_slices\_needed + **slices\_per\_pizza** - 1) // **slices\_per\_pizza**

total\_slices\_available = pizzas\_needed \* **slices\_per\_pizza**

leftover\_slices = **total\_slices\_available** - **total\_slices\_needed**

print("Total slices needed:", total\_slices\_needed)

print("Pizzas to order:", pizzas\_needed)

print("Leftover slices:", leftover\_slices)