COMP 110

CL08 – elif, Local Variables, and conditionals practice

Variables

Declaration of a variable

<name>: <type> = <value>

students: int = 300

message: str = "Howdy!"

Update a variable

<name> = <new value>

students = 325

message = "See ya!"

Diagram

```python
def number_info(num: int) -> None:
    if num < 10:
        print("Small number.")
    else:
        if num % 2 == 0:
            print("Even number.")
        else:
            print("Odd number.")
    return num

number_info(num=11)
print(number_info(num=4))
```

What if…

```python
def number_info(num: int) -> None:
    if num < 10:
        print("Small number.")
    else:
        if num % 2 == 0:
            print("Even number.")
        else:
            print("Odd number.")
    return num
```

What if…

```
1   def number_info(num: int) -> None:
2       if num < 10:
3           print("Small number.")
4       else:
5           if num % 2 == 0:
6               print("Even number.")
7           else:
8               print("Odd number.")
9       return num
```

What if…

```python
def number_info(num: int) -> None:
    if num < 10:
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```python
def number_info(num: int) -> None:
    if num < 10:
        print("Small number.")
    elif num % 2 == 0:
        print("Even number.")
    else:
        print("Odd number.")
    return num
```
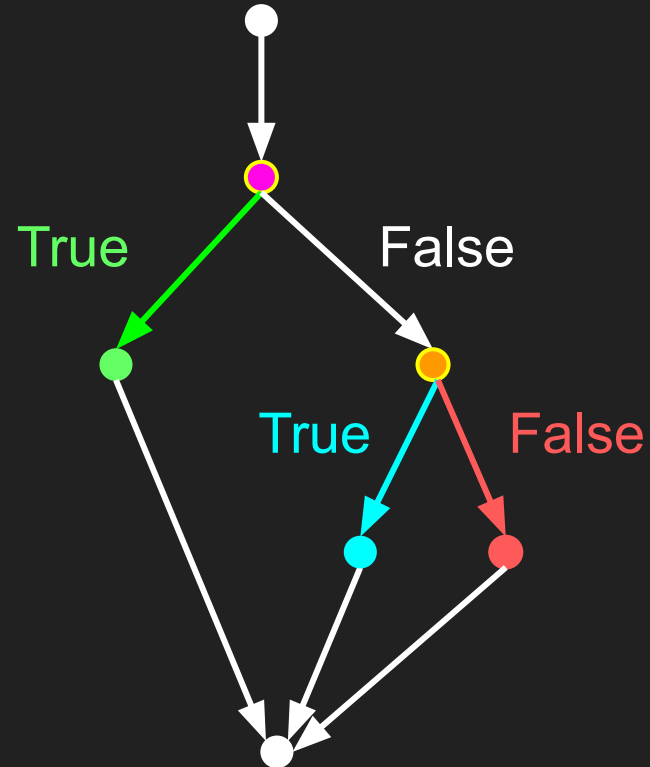
What if…

```
1  def number_info(num: int) -> None:
2      if num < 10:
3          print("Small number.")
4      else:        elif
5          if num % 2 == 0:
6              print("Even number.")
7          else:
8              print("Odd number.")
9      return num
```

```
1  def number_info(num: int) -> None:
2      if num < 10:
3          print("Small number.")
4      elif num % 2 == 0:
5          print("Even number.")
6      else:
7          print("Odd number.")
8      return num
```

Previous Control Flow

if <condition>:

    <do something>

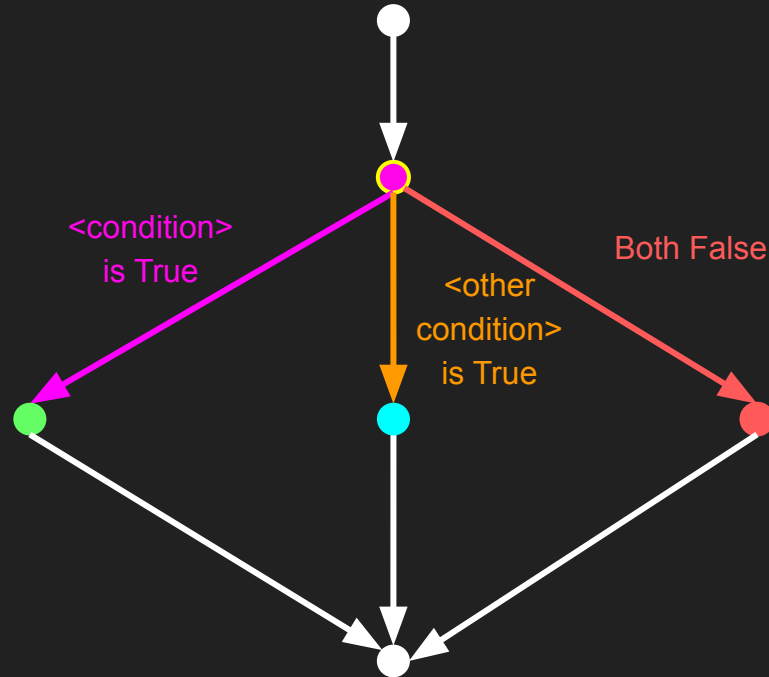else:

    if <other condition>:

        <do something else>

    else:

        <do third thing>

<rest of program>

New Control Flow

if \<condition\>:

    \<do something\>

elif \<other condition\>:

    \<do something else\>

else:

    \<do third thing\>

\<rest of program\>

Practice

- Write a function called get_weather_report that takes no inputs and returns a str
- It should use the input function to ask the user "What is the weather?" and save that as the local variable weather
- If weather is "rainy" or "cold", it should print "Bring a jacket!"
- If weather is "hot", it should print "Keep cool out there!"
- Otherwise, it should print "I don't recognize this weather."
- return the weather variable