 English Name: _____

Selection Basics

1. Draw the flowchart of each of the following Python code segments. Include `start` and `end` blocks.

```
x = -3
if x < 0:
    print("negative.")
print("complete.")
```

```
x = +3
if x < 0:
    print("negative.")
else:
    print("positive.")
print("complete.")
```

2a. Write a Python program that inputs an integer from the user that represents a temperature, then reports whether that temperature is "`cold`", "`cool`", "`moderate`", or "`warm`" based on the table to the right. The code must use a ***chained*** `if` statement.

Temperature Range	String to Print
31 and below	`cold`
32-50	`cool`
51-70	`moderate`
71 and above	`warm`

Selection Basics

3. Write a Python program that:

   a) Asks the user what they want to bake: "`pancakes`", "`cookies`", or "`brownies`".

   b) Uses a chained `if` to determine which slices of `ingredients` are needed to get the list of `required` ingredients:

   - **pancakes**: flour, sugar, butter, eggs, milk
   - **cookies**: flour, sugar, butter, chocolate chips, vanilla extract
   - **brownies**: flour, sugar, butter, eggs, cocoa powder, walnuts

```
   ingredients = [
0      "flour",
1      "sugar",
2      "butter",
3      "eggs",
4      "milk",
5      "chocolate chips",
6      "vanilla extract",
7      "cocoa powder",
8      "walnuts"
   ]
```

   c) Creates a new list called `required` by concatenating two slices:
   d) Prints out the list of `required` ingredients.
   e) If the user enters any other string, prints: "`Sorry, I don't have a recipe for that.`"

Rules: The program must use list slicing (e.g., `ingredients[start:stop]`) to extract the base and the extra block; it must not access individual list items by index (like `ingredients[0]`), and must not duplicate any of the ingredients in another string (i.e.: don't type out any of the ingredients).