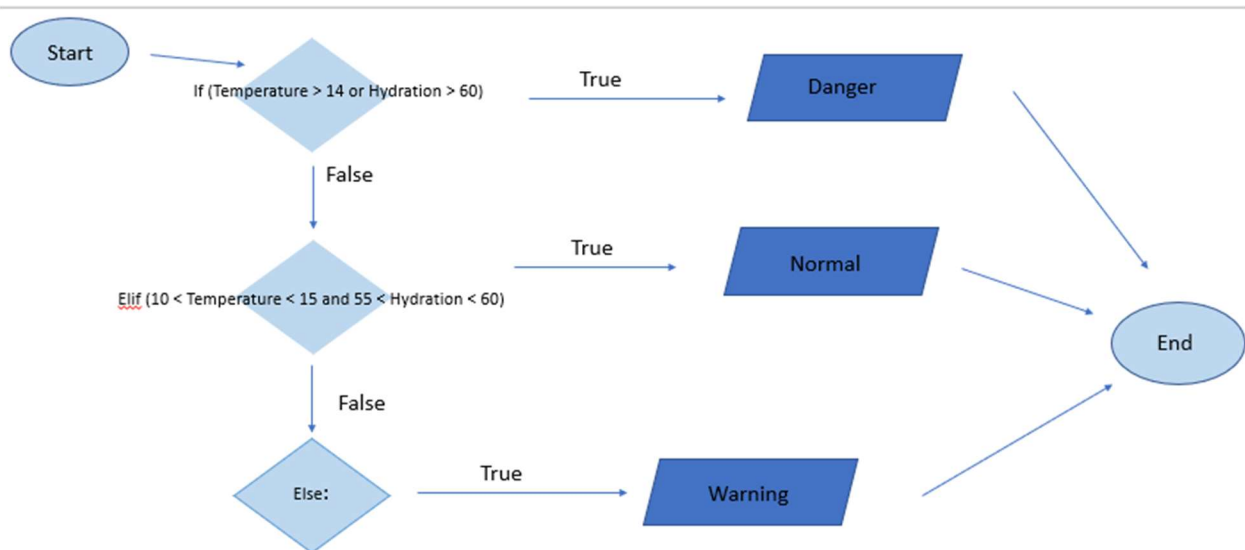


Task 1:

Part A & Part B

Operator	Hand Calc	Python
A and B	false	False
A or B	true	True
A == B	false	False
(A and B) == (A or B)	false	False
A != B	true	True
A >= B	true	True
A = B	A=false	A=False

Part C:



1.

- Normal
- Danger
- Warning

2. Conditional logic is important because it allows us to make decisions given inputs.

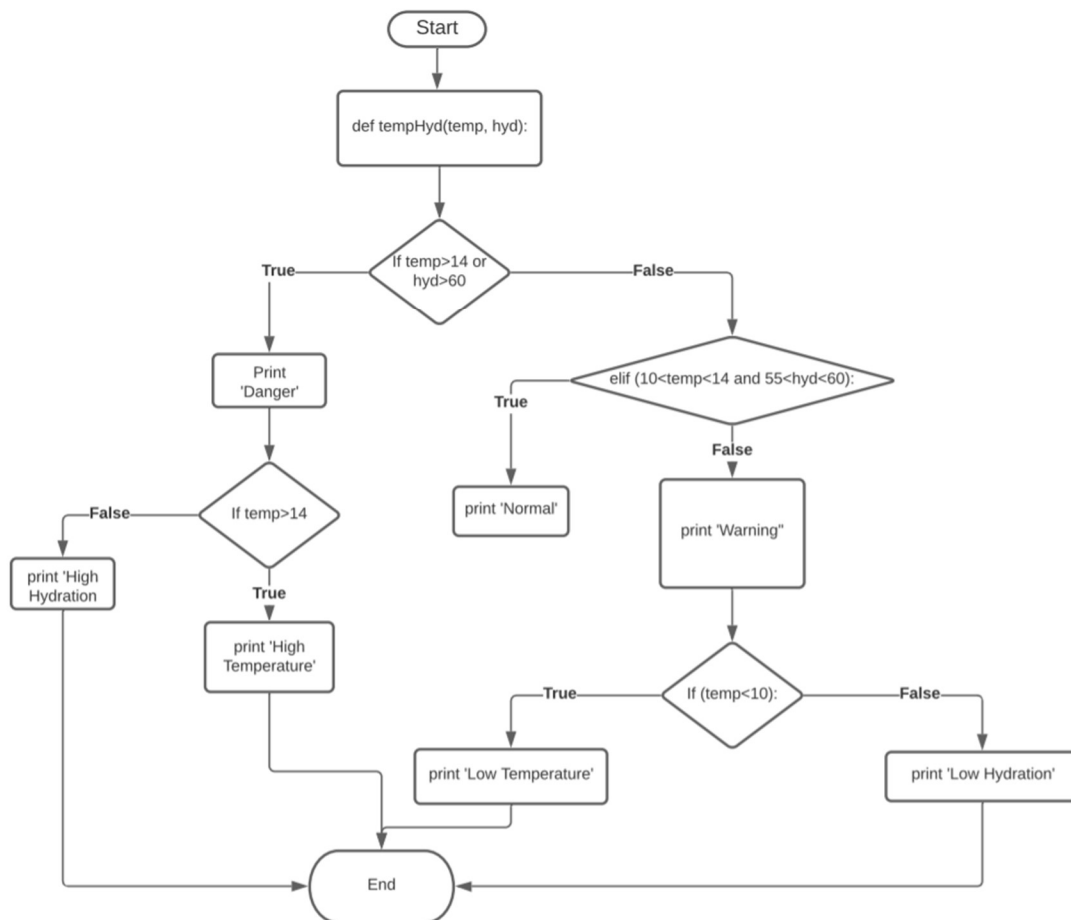
Part D

Test case results:

- Normal
- Danger
- Warning

Task 2:

Part A:



1.

- a. Danger
High Hydration
- b. Danger
High Temperature
- c. Warning
Low Temperature

Part B:

1.

d. Danger

High Hydration

e. Danger

High Temperature

f. Warning

Low Temperature

Task 3:**Part B:**

1. You can use the print function.
2. There are no syntax differences between the two Python functions.
3. DistanceBike has two parameters whereas windTurbineArea has 4 parameters.
4. You should only use the main function once (primarily to run the entire program), but you can use user-defined functions as many times as you want.

Task 4:**Part A:**

Questions:

- 1) When you try to run it, it produces a Name Error, saying, "Name 'R' is not defined."
- 2) When you change print(R) to print(radius), it prints the area (314.159...) and the radius (5)
- 3) When you change print(A) to print(area), it produces a Name Error, saying, "Name 'area' is not defined."
- 4) When you add 'global area' to the function in the first file, and change print(A) to print(area) in the second file, you still get a Name Error saying 'area' is not defined. However, when you reference the first file in front of the area variable in the second file (Py2_Task4_areas_04.area), the code outputs the correct area and radius.
- 5) Local variables are not accessible between files, but global variables are as long as you reference the file that the variable is from.

Part B

1) S1 and S2 are local variables because they are within a function and have not been defined as global. If you tried to reference these variables from the main program, it would not work.

Task 5: