## Write algorithm for Lab3 here.

## Remember to follow the rules of what makes a good algorithm from Notes #2.

Algorithm

1. Describe the purpose of the program (Given the type of ski jump and the jumper’s speed at the end of the ramp, predict how far they will jump and calculate the number of points they will earn).
2. Set height, points per meter, and par as 0
3. Prompt the user to give the type of hill.
   1. Maybe specify that they can give “normal” or “large” as answers.
4. While hill type does not equal normal and does not equal large:
   1. Output “That hill type won’t work!”
   2. Prompt the user to give the type of hill.
5. If the hill type is normal:
   1. height = 46
   2. points\_per\_meter = 2
   3. par (distance) = 90
6. Otherwise:
   1. height = 70
   2. points\_per\_meter = 1.8
   3. par (distance) = 120
7. Prompt the user to input the jumper’s speed at the end of the ramp.
8. Calculate the jumper’s time in the air (sqrt((2\*height)/9.8))
9. Calculate the distance the jumper traveled (jumper’s speed \* time in the air)
10. Calculate how many points the jumper would get on the chosen hill type.
    1. Determine if the distance is above or below par.
    2. Calculate points earned (60 + (distance – par)\*points\_per\_meter)
11. Output the jumper’s distance and points
12. If the jumper’s points are at least 61:
    1. Output “Great job for doing better than par!”
13. Otherwise if the jumper’s points are less than 10:
    1. Output “What happened?”
14. Otherwise:
    1. Output “Sorry you didn’t go very far.”