## 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. Prompt the user to give the type of hill and the jumper’s speed at the end of the ramp.
   1. Maybe specify that they can give “normal” or “large” as answers.
3. If the type of the hill is normal or large:
   1. If the hill type is normal:
      1. height = 46
      2. points\_per\_meter = 2
      3. par (distance) = 90
   2. Otherwise:
      1. height = 70
      2. points\_per\_meter = 1.8
      3. par (distance) = 120
   3. Calculate the jumper’s time in the air (sqrt((2\*height)/9.8))
   4. Calculate the distance the jumper traveled (jumper’s speed \* time in the air)
   5. 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)
   6. Output the jumper’s distance and points
   7. If the jumper’s points are at least 61:
      1. Output “Great job for doing better than par!”
   8. Or if the jumper’s points are less than 10:
      1. Output “What happened?”
   9. Otherwise:
      1. Output “Sorry you didn’t go very far.”
4. Otherwise:
   1. Output “That hill type won’t work!”