## Write algorithm for Lab1 here.

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

Algorithm

1. Create the variable height and set it equal to zero
2. Create the variable par and set it equal to zero
3. Create the variable points\_per\_meter and set it equal to zero
4. Ask user to input the hill type, using the variable hill\_type (Normal or large)
5. If hill\_type is normal,
   1. height = 46,
   2. par = 90,
   3. points\_per\_meter = 2
6. Otherwise if the hill\_type is large,
   1. height = 70,
   2. par = 120,
   3. points\_per\_meter = 1.8
7. Otherwise output to the user “Invalid hill type”
8. Ask user to input the jumper’s speed in meters per second at the end of the ramp, creating the variable jumper\_speed
9. Calculate the time in the air using sqrt((2\*height)/9.8, creating the variable time\_in\_air
10. Calculate the distance travelled using jumper\_speed \* time\_in\_air, creating the variable distance
11. Calculate points earned using 60 + (distance – par)\*points\_per\_meter, creating the variable total\_points as a float
12. If total\_points >= 61,
    1. output “Great Job for doing better than par!”
13. Otherwise if total\_points < 10,
    1. output “What happened??”
14. Otherwise,
    1. output “Sorry you didn’t go far”
15. Output distance to the user.
16. Output total\_points to the user.

Yellow = output

Red = calculation

Blue = input