

```
1  import math
2  def getLength(x,y):
3      return math.sqrt(2)*(x+y)
4  inputs = []
5  while(True):
6      inp = input()
7      inp2 = inp.split()
8      if(inp == ""):
9          break
10     inputs.append(list(map(int, inp2)))
11 maxlength=0.
12 for i in inputs:
13     if(len(i) == 1):
14         if(maxlength!=0):
15             print(maxlength)
16             maxlength = 0
17     else:
18         p = getLength(i[0],i[1])
19         if maxlength<p:
20             print()
21             maxlength = p
22 print(maxlength)
23 exit()
24
25
26
27
```