**The Snail and the Well**

1. Assign the challenge data to variables with representative names: well\_height, daily\_distance, nightly\_distance and snail\_position.

>>> well\_height = 125

>>> daily\_distance = 30

>>> nightly\_distance = -20

>>> snail\_position = daily\_distance + nightly\_distance

1. Create a variable days to keep count of the days that pass until the snail escapes the well.

>>> total\_days

1. Find the solution to the challenge using the variables defined above.

>>> total\_days = well\_height / snail\_position

1. Print the solution.

>>> print (“Total number of days:”, total\_days)

BONUS

1. How many days does it take for the snail to escape the well?

>>> len("advance\_cm")

11

>>> slide\_cm = [-20, -20, -20, -20, -20, -20, -20, -20, -20, -20, -20]

>>> snail\_position = advance\_cm + slide\_cm

Alternative

new\_list = []

for i in advance\_cm

substract = i-20

new\_list.append(substract)

print(new\_list)

new\_list = snail\_position

2. What is its maximum displacement in one day? And its minimum? Calculate the displacement using only the travel distance of the days used to get out of the well.

snail\_position = [x1, x2, x3, x4, x5, … xn]

total = 0

for i in num\_list:

total += i

print("Total is currently", total)

“”Snail gets out of the dwell on day 6””

>>> lst.remove(‘x7, x8, … xn’)

>>> min(snail\_position)

>>> max(snail\_position)

3. What is its average progress? Take into account the snail slides at night.

>>> average\_progress = (sum(advance\_cm)/len(advance\_cm)) – 20

4. What is the standard deviation of its displacement? Take into account the snail slides at night.

>>> standard\_deviation = stdev((sum(advance\_cm)/len(advance\_cm)) – 20)