

P9. (difficulty 4\*) Delivery–Guy, a package shipping company, offers a shipping cost with a fixed cost 50 baht and variable cost as follows.

It is 20 baht each kg for the first 15 kg. Then, the price is up by 5 baht every 15 kg and the package will be charged in a successive manner. For example,

14–kg pkg costs  $50 + (14 * 20) = 330$  baht.

30–kg pkg costs  $50 + (15*20) + (15*25) = 725$  baht.

42–kg pkg costs  $50 + (15*20) + (15*25) + (12*30) = 1085$  baht.

51–kg pkg costs  $50 + (15*20) + (15*25) + (15*30) + (6*35) = 1385$  baht.

Write a program to take package weight, calculate shipping cost, and report it.

Use the P9 template. (P9\_template.py. The template is only to ensure the exact display format and allows smooth auto–grading.)

Example:

```
=====
Weight:62
cost = 1780.0
=====
Weight:134
cost = 5390.0
=====
```

Hint: (1) when dealing with an undetermined number of iterations, While statement may do; (2) step can be defined as a range between minimum step weight  $w_{min}$  and maximum step weight  $w_{max}$ ; we can just get a package weight falling within this step by  $\min(p - w_{min}, w_{max} - w_{min})$ , when  $p$  is a package weight; the term  $\min(p - w_{min}, w_{max} - w_{min})$  gives a package weight within the weight range:  $p - w_{min}$  is to get what over the lower bar and  $\min( \dots, w_{max} - w_{min})$  is to cap it (so it can't go over the upper bar). If you are confused by  $\min(\dots)$ , if statement will do the magic too.

Here is P8\_template.py

```
"""
Delivery-Cheap, a package shipping company,
offers a shipping cost with a fixed cost 50 baht
and variable cost as follows.
It is 20 baht each kg for the first 15 kg.
Then, the price is up by 5 baht every 15 kg
and the package will be charged in a successive manner
by the stepping price. For example,
14-kg pkg costs 50 + (14 * 20) = 330 baht.
30-kg pkg costs 50 + (15*20) + (15*25) = 725 baht.
42-kg pkg costs 50 + (15*20) + (15*25) + (12*30) = 1085 baht.
51-kg pkg costs 50 + (15*20) + (15*25) + (15*30) + (6*35) = 1385 baht.
Write a program to take package weight, calculate shipping cost,
and report it.
"""

# Write your code here.

cost = 0

# Do not edit below this line.
print('cost = {:.2f}'.format(cost))
```