## Bread Factory

*As a young baker, you are baking the bread out of the bakery.*

You have **initial energy 100 and initial coins 100**. You will be given **a string, representing the working day events**. Each event is separated with **'|'** (vertical bar): **"event1|event2|event3…"**

Each event contains event name or item and a number, separated by dash(**"{event/ingredient}-{number}"**)

* If the event is **"rest":** you gain energy, the number in the second part. But your energy **cannot exceed** your **initial energy (100)**. Print: **"You gained {0} energy."**.

After that, print your current energy: **"Current energy: {0}."**.

* If the event is **"order"**: You've earned some coins, the number in the second part. Each time you get an order, your **energy decreases with 30 points.**
  + If you have energy to complete the order, print: **"You earned {0} coins."**.
  + If your energy drops below 0, you **skip the order** and **gain 50 energy points**. Print: "You had to rest!".
* In any other case you are having an ingredient, you have to buy. The second part of the event, contains the coins you have to spent and remove from your coins.
  + If you are not bankrupt **(coins <= 0)** you've bought the ingredient successfully, and you should print ("You bought {ingredient}.")
  + If you went bankrupt, print **"Closed! Cannot afford {ingredient}."** and your bakery rush is over.

If you managed to handle all events through the day, print on the next three lines:

**"Day completed!"**, **"Coins: {coins}"**, **"Energy: {energy}"**.

### Input / Constraints

You will receive a string, representing the working day events, separated with **'|'** (vertical bar): **" event1|event2|event3…"**.

Each event contains event name or ingredient and a number, separated by dash(**"{event/ingredient}-{number}"**)

### Output

Print the corresponding messages, described above.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| rest-2|order-10|eggs-100|rest-10 | You gained 0 energy.  Current energy: 100.  You earned 10 coins.  You bought eggs.  You gained 10 energy.  Current energy: 80.  Day completed!  Coins: 10  Energy: 80 |
| **Input** | **Output** |
| order-10|order-10|order-10|flour-100|order-100|oven-100|order-1000 | You earned 10 coins.  You earned 10 coins.  You earned 10 coins.  You bought flour.  You had to rest!  Closed! Cannot afford oven. |

*... 1 package (1/4 ounce) active dry yeast*

*2-1/4 cups warm water (110° to 115°)*

*3 tablespoons sugar*

*1 tablespoon salt*

*2 tablespoons canola oil*

*6-1/4 to 6-3/4 cups all-purpose flour ...*