

3389 Quick Change

J.P. Flathead's Grocery Store hires cheap labor to man the checkout stations. The people he hires (usually high school kids) often make mistakes making change for the customers. Flathead, who's a bit of a tightwad, figures he loses more money from these mistakes than he makes; that is, the employees tend to give more change to the customers than they should get.

Flathead wants you to write a program that calculates the number of quarters (\$0.25), dimes (\$0.10), nickels (\$0.05) and pennies (\$0.01) that the customer should get back. Flathead always wants to give the customer's change in coins if the amount due back is \$5.00 or under. He also wants to give the customers back the smallest total number of coins. For example, if the change due back is \$1.24, the customer should receive 4 quarters, 2 dimes, 0 nickels, and 4 pennies.

Input

The first line of input contains an integer N which is the number of datasets that follow. Each dataset consists of a single line containing a single integer which is the change due in cents, C , ($1 \leq C \leq 500$).

Output

For each dataset, print out the dataset number, a space, and the string:

Q QUARTER(S), D DIME(S), n NICKEL(S), P PENNY(S)

Where Q is the number of quarters, D is the number of dimes, n is the number of nickels and P is the number of pennies.

Sample Input

```
3
124
25
194
```

Sample Output

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1 4 QUARTER(S), 2 DIME(S), 0 NICKEL(S), 4 PENNY(S)
2 1 QUARTER(S), 0 DIME(S), 0 NICKEL(S), 0 PENNY(S)
3 7 QUARTER(S), 1 DIME(S), 1 NICKEL(S), 4 PENNY(S)
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