###### Test Data for 28th Contest

###### Problem 1:  Input:  2

100

125

###### Output:  5050

15625

###### Problem 2:  Input:  8

3 3 3 3

10 11 12 13

4 4 8 8

7 9 9 9

8 8 8 9

1 2 2 3

4 4 5 6

7 7 8 9

Output:  Four-of-a-Kind 3 3 3 3

No-Matches 10 11 12 13

Two-Pairs 4 4 8 8

Three-of-a-Kind 7 9 9 9

Three-of-a-Kind 8 8 8 9

One-Pair 1 2 2 3

One-Pair 4 4 5 6

One-Pair 7 7 8 9

###### Problem 3:  Input:  4

13 A B C D E F G H I J K L M

M A B C D E F G H I J K L

5 V W X Y Z

W X Y V Z

12 B C D E F G H I J K L M

M B C D E G F H I J K L

4 P Q R S

S R Q P

###### Output:  CYCLE

NO CYCLE

NO CYCLE

NO CYCLE

###### Problem 4:  Input:  6

7213

7215

3375

5306

5295

8888

###### Output:  7213 8

7215 4

3375 3

5306 2

5295 5

8888 2