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The Time in Words



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Problem

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Given the time in numerals we may convert it into words, as shown below:

5:00 → five o' clock
5:01 → one minute past five
5:10 → ten minutes past five
5:15 → quarter past five
5:30 → half past five
5:40 → twenty minutes to six
5:45 → quarter to six
5:47 → thirteen minutes to six
5:28 → twenty eight minutes past five

Write a program which prints the time in words for the input given in the format mentioned above.

Input Format

There will be two lines of input:

 H , representing the hours M , representing the minutes

Constraints

- $1 \leq H < 12$
- $0 \leq M < 60$

Output Format

Display the time in words.

Sample Input 0

```
5
47
```

Sample Output 0

```
thirteen minutes to six
```

Sample Input 1

```
3
00
```

Sample Output 1

Medium

Submitted 33843 times
Max Score 25

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three o' clock

Current Buffer (saved locally, editable) C++14

```
1 #include <iostream>
2 #include <vector>
3
4 static std::vector<std::string> numbers =
5 {
6     "zero", "one", "two", "three", "four", "five",
7     "six", "seven", "eight", "nine", "ten",
8     "eleven", "twelve", "thirteen", "fourteen", "fifteen",
9     "sixteen", "seventeen", "eighteen", "nineteen", "twenty",
10    "twenty one", "twenty two", "twenty three", "twenty four", "twenty five",
11    "twenty six", "twenty seven", "twenty eight", "twenty nine" };
12
13 inline void printInWords(const std::string& H, const std::string& M)
14 {
15     const int Hours = std::stoi(H);
16     const int Minutes = std::stoi(M);
17     if (Minutes % 15 == 0)
18     {
19         switch (Minutes)
20         {
21             case 15: std::cout << "quarter past " << numbers[Hours] << std::endl; break;
22             case 30: std::cout << "half past " << numbers[Hours] << std::endl; break;
23             case 45: std::cout << "quarter to " << numbers[Hours+1] << std::endl; break;
24             default: std::cout << numbers[Hours] << " o' clock" << std::endl; break;
25         }
26     }
27     else if (Minutes > 30)
28     {
29         std::cout << numbers[60-Minutes] << " minutes to " << numbers[Hours+1] << std::endl;
30     }
31     else
32     {
33         (Minutes == 1) ?
34         std::cout << numbers[Minutes] << " minute past " << numbers[Hours] << std::endl :
35         std::cout << numbers[Minutes] << " minutes past " << numbers[Hours] << std::endl;
36     }
37 }
38
39 int main()
40 {
41     std::string Hours; std::cin >> Hours;
42     std::string Minutes; std::cin >> Minutes;
43
44     printInWords(Hours, Minutes);
45     return 0;
46 }
```

Line: 45 Col: 1

☐ Test against custom input

Run Code

Submit Code

Upload Code as File

1
1

Congrats, you solved this challenge!

Challenge your friends: f t in

✓ Test Case #0

✓ Test Case #1

✓ Test Case #2

✓ Test Case #3

✓ Test Case #4

✓ Test Case #5

✓ Test Case #6

✓ Test Case #7

✓ Test Case #8

✓ Test Case #9

✓ Test Case #10

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