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| INPUTS | PROCESSING STEPS | OUTPUTS |
| User inputs integer | Receive length of input and put it in inputLength | Display showing outNumber as string |
|  | Set counter to inputLength minus 1 |  |
|  | Take the inputLength mod 3 and put it in inputTen |  |
|  | Receive digit and put it in currentDigit |  |
|  | If currentDigit is 0, go to next digit |  |
|  | If currentDigit is not 0 and counter is 2 mod 3, append name of currentDigit and “hundred” |  |
|  | If currentDigit is not 0 and counter is equal to 1 mod 3 and currentDigit is not 1, append corresponding number ending in “-ty” |  |
|  | If currentDigit is not 0 and currentDigit is 1 and counter is equal to 1 mod 3, read next digit and append corresponding number |  |
|  | If currentDigit is not 0 and counter is equal to 0 mod 3, append corresponding number |  |
|  | Take the floor function of ( (inputLength-1) divided by 3 ) and put it in inputTenCubed |  |
|  | If counter is equal to 0 mod 3, append corresponding “power of thousand” to outnumber |  |
|  | Move to next digit |  |
|  | Decrease counter by 1 and loop |  |

ALGORITHM

1. User inputs integer
2. Receive length of integer and put it in inputLength
3. Set counter to inputLength -1
4. Receive digit and put it in currentDigit
5. If currentDigit is 0, go to next digit
6. If currentDigit is not 0 and counter is 2 mod 3, append name of currentDigit and “hundred”
7. If currentDigit is not 0 and counter is equal to 1 mod 3 and currentDigit is not 1, append corresponding number ending in “-ty”
8. If currentDigit is 1 and counter is equal to 1 mod 3, read next digit and append corresponding number
9. Take the floor function of ( (inputLength-1) divided by 3 ) and put it in inputTenCubed
10. If counter is equal to 0 mod 3 and the preceding digit is 1, go to next digit
11. If counter is equal to 0 mod 3 and the preceding digit is not 1, append name of digit
12. If counter is equal to 0 mod 3, append corresponding “power of thousand” to outnumber
13. Move to next digit
14. Decrease counter by 1 and go back to step 4