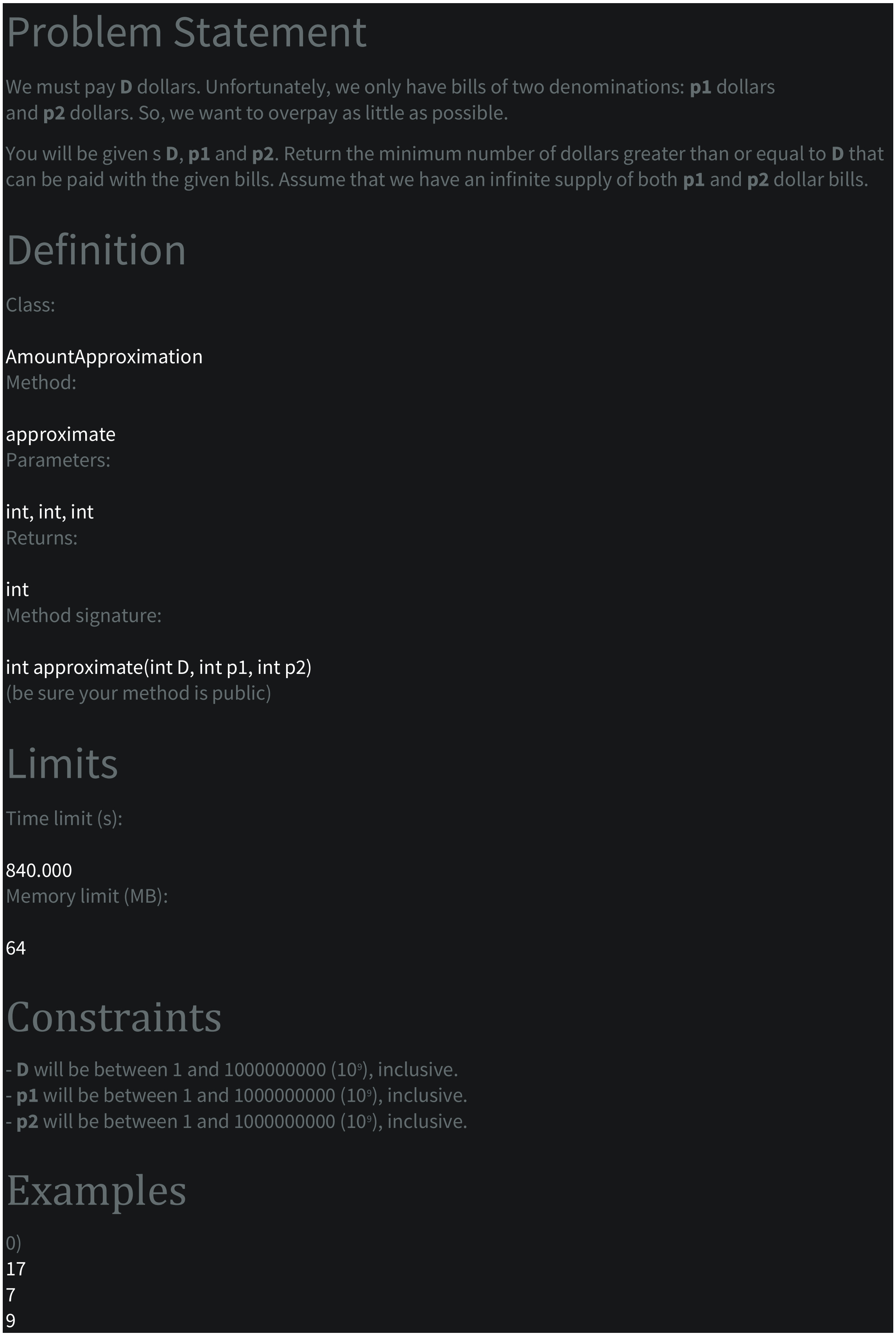


Problem Statement

We must pay **D** dollars. Unfortunately, we only have bills of two denominations: **p1** dollars and **p2** dollars. So, we want to overpay as little as possible.

You will be given s **D**, **p1** and **p2**. Return the minimum number of dollars greater than or equal to **D** that can be paid with the given bills. Assume that we have an infinite supply of both **p1** and **p2** dollar bills.

Definition

Class:

AmountApproximation
Method:

approximate
Parameters:

int, int, int
Returns:

int
Method signature:

int approximate(int D, int p1, int p2)
(be sure your method is public)

Limits

Time limit (s):

840.000
Memory limit (MB):

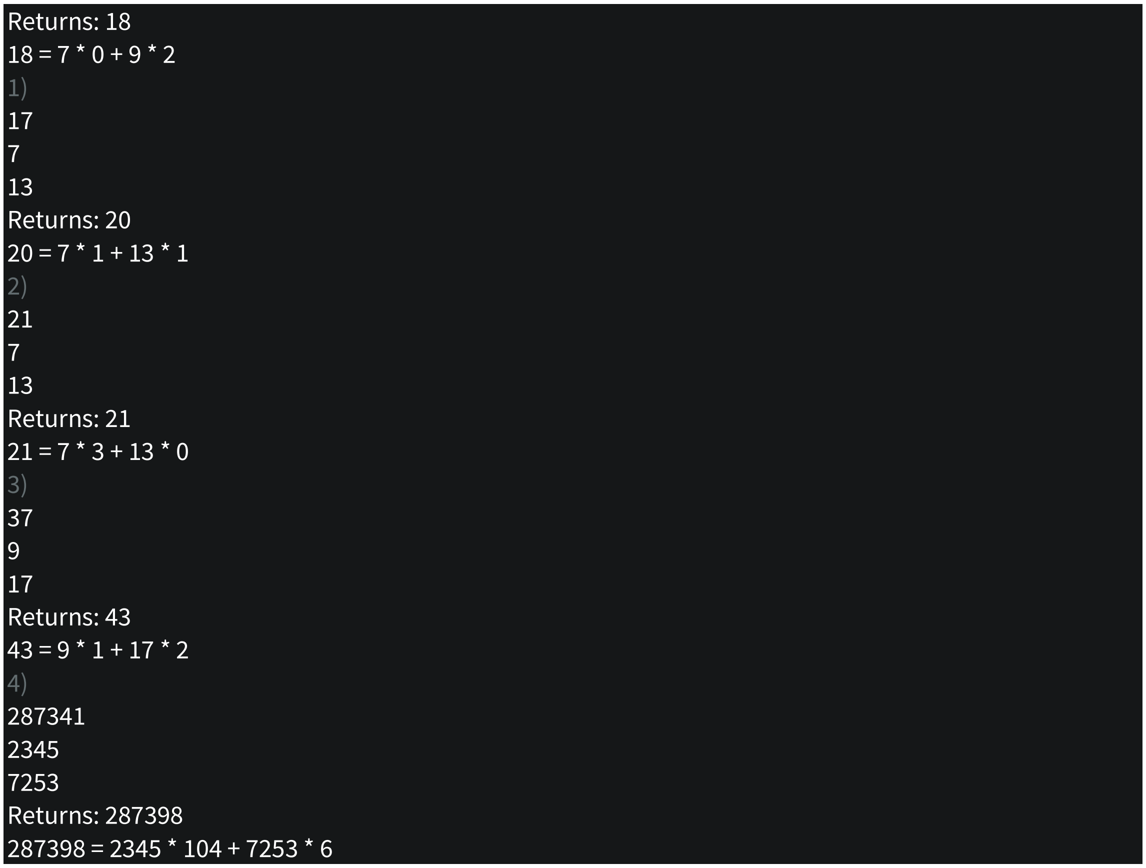
64

Constraints

- **D** will be between 1 and 1000000000 (10^9), inclusive.
- **p1** will be between 1 and 1000000000 (10^9), inclusive.
- **p2** will be between 1 and 1000000000 (10^9), inclusive.

Examples

0)
17
7
9



```
Returns: 18
18 = 7 * 0 + 9 * 2
1)
17
7
13
Returns: 20
20 = 7 * 1 + 13 * 1
2)
21
7
13
Returns: 21
21 = 7 * 3 + 13 * 0
3)
37
9
17
Returns: 43
43 = 9 * 1 + 17 * 2
4)
287341
2345
7253
Returns: 287398
287398 = 2345 * 104 + 7253 * 6
```