

Question 1

Correct

Marked out of 10.00

A number is considered to be ugly if its only prime factors are 2, 3 or 5.

[1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 15, ...] is the sequence of ugly numbers.

Task:

Create a program which takes a number n as input and checks if it's an ugly number.

Print ugly if it is ugly, else print not ugly

Hint:

An ugly number U can be expressed as: $U = 2^a * 3^b * 5^c$, where a, b and c are non-negative integers.

Input Format

First line contains number tc showing the number of test cases.

The following tc lines contains the number n which you need to check whether it is ugly or not.

Output Format

The output contains tc number of lines.

Where each line contains the "ugly" or "not ugly" as per the above mentioned rules.

For example:

Input	Result
8	ugly
2	ugly
3	ugly
5	not ugly
0	ugly
1	not ugly
-1	not ugly
-2	not ugly
420	
11	not ugly
0	ugly
1	ugly
2	ugly
3	ugly
4	ugly
5	ugly
6	not ugly
7	ugly
8	ugly
9	ugly
10	
11	not ugly
-1	not ugly
-2	not ugly
-3	not ugly
-4	not ugly
-5	not ugly
-6	not ugly
-7	not ugly
-8	not ugly
-9	not ugly
-10	ugly
625	

Answer: (penalty regime: 0 %)

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1 def isugly(num):
2     if num<=0:
3         return False
4     for i in [2,3,5]:

```

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5  while num%1==0:
6      num//=1
7      return num==1
8  def ugly(lst):
9      for n in lst:
10         status="ugly" if isugly(n) else "not ugly"
11         print(status)
12  r=int(input())
13  lst=[]
14  for k in range(r):
15      c=int(input())
16      lst.append(c)
17  result=ugly(lst)
18
19
20
21

```

	Input	Expected	Got	
✓	8 2 3 5 0 1 -1 -2 420	ugly ugly ugly not ugly ugly not ugly not ugly not ugly not ugly	ugly ugly ugly not ugly ugly not ugly not ugly not ugly not ugly	✓
✓	11 0 1 2 3 4 5 6 7 8 9 10	not ugly ugly ugly ugly ugly ugly not ugly ugly ugly ugly ugly	not ugly ugly ugly ugly ugly ugly not ugly ugly ugly ugly ugly	✓
✓	11 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10 625	not ugly not ugly not ugly not ugly not ugly not ugly not ugly not ugly not ugly not ugly ugly	not ugly not ugly not ugly not ugly not ugly not ugly not ugly not ugly not ugly not ugly ugly	✓

Passed all tests! ✓