

Java has 8 primitive data types: `char`, `boolean`, `byte`, `short`, `int`, `long`, `float`, and `double`. For this exercise, we'll work with the primitives used to hold integer values (`byte`, `short`, `int`, and `long`):

- A byte is an 8-bit signed integer.
- A short is a 16-bit signed integer.
- An int is a 32-bit signed integer.
- A long is a 64-bit signed integer.

Given an input integer, you must determine which primitive data types are capable of properly storing that input.

To get you started, a portion of the solution is provided for you in the editor.

Reference: <https://docs.oracle.com/javase/tutorial/java/nutsandbolts/datatypes.html>

Input Format

The first line contains an integer, T , denoting the number of test cases.

Each test case, T , is comprised of a single line with an integer, n , which can be arbitrarily large or small.

Output Format

For each input variable *n* and appropriate primitive *dataType*, you must determine if the given primitives are capable of storing it. If yes, then print:

n can be fitted in:
+ dataType

If there is more than one appropriate data type, print each one on its own line and order them by size (i.e.:

byte < short < int < long).

If the number cannot be stored in one of the four aforementioned primitives, print the line:

n can't be fitted anywhere.

Sample Input

5
-150

150000

Q Search

```

1  import java.util.*;
2  import java.io.*;
3  class Solution{
4      public static void main(String []argh)
5      {
6          Scanner sc = new Scanner(System.in);
7          int t=sc.nextInt();
8          for(int i=0;i<t;i++)
9          {
10             try
11             {
12                 long x=sc.nextLong();
13                 System.out.println(x+" can be fitted in:");
14                 if(x>=128 && x<=127)System.out.println("  byte");
15                 if (x>=32768 && x<=32767)System.out.println("  short");
16                 if (x>=2147483648 && x<=2147483647)System.out.println("  int");
17                 if (x>=9223372036854775808L && x<=9223372036854775807L)System.out.println("  long");
18             }
19             catch(Exception e)
20             {
21                 System.out.println(sc.next()+" can't be fitted anywhere.");
22             }
23         }
24     }
25 }

```

Line: 35 Col: 2

T. UploadCode asFile

Test against custom input

Run Code

Submit Code

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Input Format

Each test case, T , is comprised of a single line with an integer, n , which can be arbitrarily large or small.

For each input variable *n* and appropriate primitive *dataType*, you must determine if the given primitives are capable of storing it. If yes, then print:

If there is more than one appropriate data type, print each one on its own line and order them by size (i.e.,

byte < *short* < *int* < *long*).

If the number cannot be stored in one of the four aforementioned primitives, print the line:

Sample Input

```

24 }
25 }

```

†. Upload Code as File

☐ Test against custom input

Run Code

Submit Code

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

✔ Sample Test case 0

[illegible]

size: 25 col: 2

- Reference: <https://docs.oracle.com/javase/tutorial/java/nutsandbolts/datatypes.html>

Each test case, T , is comprised of a single line with an integer, n , which can be arbitrarily large or small.

For each input variable *n* and appropriate primitive *dataType*, you must determine if the given primitives are capable of storing it. If yes, then print:

byte < short < int < long).

If the number cannot be stored in one of the four aforementioned primitives, print the line:

Sample Input

52/8

☐ Test against custom input

Submit Code

5280

You are now 22 points away from the 3rd star for your java badge.

Next Challenge

You solved this challenge. Would you like to challenge your friends?

Compiler Message

Success

input(stdin)

150

1500

input(stdin)

Download

[illegible]

Expected Output

Download

10

