[](https://www.techgig.com/codegladiators/dashboard)

Bob The Bear

[Instructions](javascript:void(0);) [Help](javascript:void(0);)

Time:

01:11/04:00:00

* [**Problem Statement**](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYnBXSlYrMmVZTGE3S3FVVVQwZjM0RT0=/1&msg_type=1#domain-problem)
* [Discussions](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYnBXSlYrMmVZTGE3S3FVVVQwZjM0RT0=/1&msg_type=1#domain-comments)
* [My Submissions](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYnBXSlYrMmVZTGE3S3FVVVQwZjM0RT0=/1&msg_type=1#domain-submission)

Bob The Bear (100 Marks)

Bob is a grizzly bear and just like all grizzlies he loves hunting salmon fish. Bob has a strategy for catching salmons. He stands at the edge of the river and waits for the fishes to cross him. Whenever a fish comes in the same line as that of Bob, he catches it.

For the sake of the problem assume the river is flowing from **left to right** and Bob is currently sitting at **x-coordinate = 0** (origin). All the fishes are swimming with the river's flow at a uniform speed of **1** from left to right. The x-coordinates increases as we move rightwards in the river and decreases as we move leftwards. **Initially all the fishes has non-positive x-coordinates.**

You are given the information about **N** salmons in two arrays **len** and **time**, where len[i] = length of the ith salmon and time[i] = time at which the head of the ith salmon reaches the x-coordinate = 0 (origin). So, at any time T, the ith salmon  has its head at x-coordinate = T - time[i] and tail at x-coordinate = T - time[i] - len[i].

At any point of time Bob can catch all the salmons whose any part of body (between head and tail, both inclusive) is at origin.

**Bob wants to catch salmons no more than twice**. What is the maximum number of Salmons Bob can catch?

**Input Format**

First line of input contains an integer N representing the number of salmons.

Second line of input contains N space separated integers representing the contents of array **len**.

Third line of input contains N space separated integers representing the contents of array **time**.

The last line of input is kept blank.

**Constraints**

1 <= N <= 1000

1 <= len[i] <= 1000, 000, 000

0 <= time[i] <= 1000, 000, 000

**Output Format**

An integer representing the maximum number of salmons Bob can catch.

**Sample TestCase 1**

Input

5

2 4 4 2 4

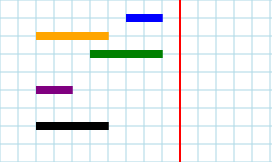
1 4 1 6 4

Output

5

Explanation

The situation at time = 0 is shown in the following figure.



The red line denotes x = 0 (origin) ,Bob is sitting. The blue line shows 1st salmon, the orange one shows 2nd salmon, the green one shows 3rd salmon and so on.

Bob will catch salmon 1 and 3 at time = 2 and will catch salmon 2, 4 and 5 at time = 7.

**Sample TestCase 2**

Input

1

1

2

Output

1

[Sample Problem with Solution](https://www.techgig.com/platform-faq)





1

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/\* Read input from STDIN. Print your

    output to STDOUT\*/

#include<stdio.h>

int main(int argc, char \*a[])

{

//Write code here

}

NORMALLine: 7 Col: 1

Top of Form

Bottom of Form

Click here to move

[see warning log!](javascript:void(0);)

[](https://www.techgig.com/codegladiators/dashboard)

#### Bob The Bear

[Instructions](javascript:void(0);) [Help](javascript:void(0);)

Time:

01:12/04:00:00

* [Problem Statement](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYjBkZXlPOXBpbXhWUWk4N1VOcllpMnpDdm16c3ZNcWFDQ3ZGc0Vyb1JYUA==/1#domain-problem)
* [**Discussions**](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYjBkZXlPOXBpbXhWUWk4N1VOcllpMnpDdm16c3ZNcWFDQ3ZGc0Vyb1JYUA==/1#domain-comments)
* [My Submissions](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYjBkZXlPOXBpbXhWUWk4N1VOcllpMnpDdm16c3ZNcWFDQ3ZGc0Vyb1JYUA==/1#domain-submission)

### Comments (67)

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##### [Sanved Joshi](https://www.techgig.com/sanvedjoshi)3 hrs ago

What if 4hr session times out?

It starts again?

[00Add Reply](javascript:void(0);)

* 

##### [harshvardhan singh](https://www.techgig.com/harshvardhansingh9)3 hrs ago

I have submitted the question, but my points not showing on dashboard or leaderboard. Also, it again sending me to resume the contest.

[00Add Reply](javascript:void(0);)

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##### [Varun M](https://www.techgig.com/varunm10)3 hrs ago

anyone here whose solution timed out in python but went through in C with the same complexity?

[00Add Reply](javascript:void(0);)

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##### [Oracle Apps](https://www.techgig.com/oracleapps2)5 hrs ago

very hard questions :( how many qualify next round? will it onsite final?

[00Add Reply](javascript:void(0);)

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##### [Shanmukha](https://www.techgig.com/shanmukha13)12 hrs ago

but  bob  can catch salmon 2  and  5  at  time  5  right? then  why  does  he  wait  till  time  7  to  catch  salmon 2, 5, and  4?

If he does so the answer becomes 4 , not 5

[00Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) Shanmukha 9 hrs ago

 Bob wants to catch maximum number of salmons. Catching salmons at time = 5 will lead to answer = 4. On the other hand, if he follows the strategy described in the sample input, then he'll be able to catch 5 salmons. If there are multiple possible times that lead to the same answer, you are allowed to any of them.

[00Add Reply](javascript:void(0);)

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##### [harshit yadav](https://www.techgig.com/harshityadav6)18 hrs ago

  i am not able to write anything in the code editor and also not able to change the compilerc to c++.please resolve the  
issue quickly.

[00Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) harshit yadav 9 hrs ago

You'll be seeing a dialog box at the bottom of the screen asking for flash permission. Try allowing it and then try.

[00Add Reply](javascript:void(0);)

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##### [avinash singh](https://www.techgig.com/avinashsingh204)23 hrs ago

how can i get furthur test cases

[00Add Reply](javascript:void(0);)

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##### [T VENKATESH](https://www.techgig.com/tvenkatesh8)1 day ago

Every time bob is catchingthe salmons. Is there any situation bob will miss the salmons?

[80Add Reply](javascript:void(0);)

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##### [Anita Balasubramanian](https://www.techgig.com/anitabalasubramanian)2 days ago

Hi. Any complex test cases available? Mine does not clearthe third though working my sample test cases is giving me correct values.

[43Add Reply](javascript:void(0);)

* + https://www.techgig.com/files/default-icon.png

##### [hardik amipara](https://www.techgig.com/hardikamipara) Anita Balasubramanian 20 hrs ago

I have same problem,  
any clue for third test case.

[00Add Reply](javascript:void(0);)

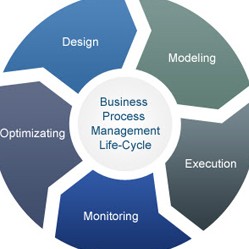
* https://www.techgig.com/files/default-icon.png

##### [Pranav Rajesh](https://www.techgig.com/pranavrajesh)2 days ago

I am not able to change to any language and not even able to write the code.

Can any one please help?

[00Add Reply](javascript:void(0);)

* + 

##### [Kuldeep Singh](https://www.techgig.com/kuldeepsingh105) Pranav Rajesh 1 day ago

Please allow thw webcam first to change your language or write the code.

[00Add Reply](javascript:void(0);)

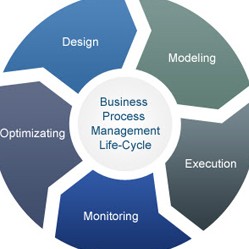
* 

##### [Sridhar Sivaraman](https://www.techgig.com/sridharsivaraman4)2 days ago

Does anybody have any test cases?

I'm failingtest cases after 7 with timelimit exceeded error

[00Add Reply](javascript:void(0);)

* + 

##### [Kuldeep Singh](https://www.techgig.com/kuldeepsingh105) Sridhar Sivaraman 2 days ago

We can't see background test case.

Please check your code against larger custom test case.

[00Add Reply](javascript:void(0);)

* 

##### [Sumeet Agrawal](https://www.techgig.com/sumeetagrawal5)3 days ago

* + The problem statement mentions that the last line of input will be kept blank. However when I use Python3, I think the inputs are not formatted to respect this statement.
  + The problem statement mentions that time[i] should be <=1000,000,000. Does this mean 1000 and the rest of the 0s are there by mistake or does it mean 1 billion?

[00Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) Sumeet Agrawal 2 days ago

 1 billion

[00Add Reply](javascript:void(0);)

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##### [durvesh kambli](https://www.techgig.com/durveshkambli2)3 days ago

>The last line of input is kept blank.  
What does that mean?  
  
Also what is the max number of attempts? And can I retry once the time runs out?

[50Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) durvesh kambli 2 days ago

Unlimited attempts. There is a new lineacter after the last input.

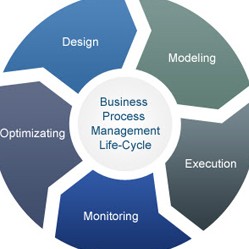
[10Add Reply](javascript:void(0);)

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##### [Pratham Jain](https://www.techgig.com/prathamjain5)3 days ago

I am not able to allow webcam and unable to change the language, please help

[00Add Reply](javascript:void(0);)

* + 

##### [Kuldeep Singh](https://www.techgig.com/kuldeepsingh105) Pratham Jain 2 days ago

Share your browser details or try in incognito mode

[10Add Reply](javascript:void(0);)

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##### [Jyotish Bhaskar](https://www.techgig.com/jyotishbhaskar)4 days ago

what is T and its range?

[00Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) Jyotish Bhaskar 4 days ago

 T is just any moment of time. T is used to explain an example situation. It has not any significance in the problem. Re-read the problem to better get the idea.

[10Add Reply](javascript:void(0);)

* https://www.techgig.com/files/default-icon.png

##### [T VENKATESH](https://www.techgig.com/tvenkatesh8)4 days ago

How much time bob will take to eat a salmon

[00Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) T VENKATESH 4 days ago

Eating salmons don't take any time.

[20Add Reply](javascript:void(0);)

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##### [samyak](https://www.techgig.com/manish490)4 days ago

Code editor is not working

[00Add Reply](javascript:void(0);)

* https://www.techgig.com/files/default-icon.png

##### [Atishay Jain](https://www.techgig.com/atishayjain)4 days ago

How u guys are calculating the time ?

[00Add Reply](javascript:void(0);)

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##### [mumbai m](https://www.techgig.com/mumbaim)4 days ago

Hey will salmon overlap with one another on coordinates?

[00Add Reply](javascript:void(0);)

* + 

##### [Saurabh Anand](https://www.techgig.com/saurabhanand24) mumbai m 4 days ago

Yes.

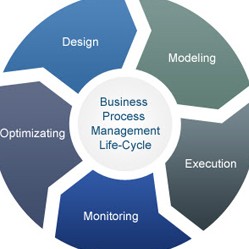
[10Add Reply](javascript:void(0);)

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##### [Simarjit Singh](https://www.techgig.com/simarjitsingh6)4 days ago

Unable to hit the Allow Button! Help!

[00Add Reply](javascript:void(0);)

* + 

##### [Kuldeep Singh](https://www.techgig.com/kuldeepsingh105) Simarjit Singh 2 days ago

try after clearing browser cookie and cache.

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##### [Parvez Dittia](https://www.techgig.com/parvezdittia)4 days ago

I dont get the test cases:

 why cant bob catch salmon 1 and 3 at time = 1 & salmon 2, salmon 4, salmon 5 at t=6 ???

[103Add Reply](javascript:void(0);)

[**View all 2 replies**](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYjBkZXlPOXBpbXhWUWk4N1VOcllpMnpDdm16c3ZNcWFDQ3ZGc0Vyb1JYUA==/1)

* https://www.techgig.com/files/default-icon.png

##### [Het Shah](https://www.techgig.com/hetshah7)4 days ago

 First test case says Bob will catch salmon 1 and 3 at time = 2 and will catch salmon 2, 4 and 5 at time = 7.

But why Bob doesn't catch salmon 1 and 3 at time = 1.

[00Add Reply](javascript:void(0);)

* + https://www.techgig.com/files/default-icon.png

##### [Hetal Rachh](https://www.techgig.com/hetalrachh) Het Shah 3 days ago

Even I have same doubt, Does anyone know? Because it is mentioned that Bob can catch salmon when any part of body (between head and tail, both inclusive) is at origin. So when time=1 first and third salmon will have its head at origin. So why not at time=1?

[00Add Reply](javascript:void(0);)

* + - https://www.techgig.com/files/default-icon.png

##### [Vivek Singh](https://www.techgig.com/viveksingh324) Hetal Rachh 2 days ago

it doesn't matter, the main focus is on catching the maximum number of fishes as different as possible in 2 turns. So even if it catches at 1,3 at time = 1 and 2,4,5 at time = 7 the answer will be same. Total = 5;

[00Add Reply](javascript:void(0);)

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##### [Oracle Apps](https://www.techgig.com/oracleapps2)4 days ago

hola gentlemen!!!

[01Add Reply](javascript:void(0);)

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##### [micheal](https://www.techgig.com/micheal5)5 days ago

but  bob  can  catch  salmon  2  and  5  at  time  5  right? then  why  does  he  wait  till  time  7  to  catch  salmon 2, 5, and  4?

[00Add Reply](javascript:void(0);)

* + https://www.techgig.com/files/default-icon.png

##### [Oracle Apps](https://www.techgig.com/oracleapps2) micheal 4 days ago

read it you dick

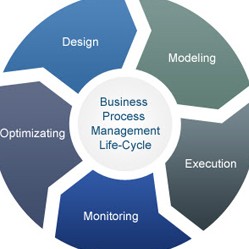
[00Add Reply](javascript:void(0);)

* https://www.techgig.com/files/default-icon.png

##### [micheal](https://www.techgig.com/micheal5)5 days ago

how many times can we submit the solution?

[00Add Reply](javascript:void(0);)

* + 

##### [Kuldeep Singh](https://www.techgig.com/kuldeepsingh105) micheal 1 day ago

No limit.

[00Add Reply](javascript:void(0);)

* + 

##### [Gaurav Kantrod](https://www.techgig.com/gauravkantrod) micheal 4 days ago

Until u get tired of submitting it.

[20Add Reply](javascript:void(0);)

* https://www.techgig.com/files/default-icon.png

##### [T VENKATESH](https://www.techgig.com/tvenkatesh8)5 days ago

How many salmons bob will eat at a time

[10Add Reply](javascript:void(0);)

* + 

##### [Gahan](https://www.techgig.com/gahan)T VENKATESH 5 days ago

According to problem statement: "At any point of time Bob can catchthe salmons whose any part of body (between head and tail, both inclusive) is at origin."

[00Add Reply](javascript:void(0);)

* https://www.techgig.com/files/default-icon.png

##### [anurag](https://www.techgig.com/anurag195)5 days ago

Bob will catch salmon 1 and 3 at time = 2 and will catch salmon 2, 4 and 5 at time = 7.

My Understanding is 1 and 3 can be caught at same time t = 1 can anyone explain this statement?

[30Add Reply](javascript:void(0);)

[**View all 2 replies**](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYjBkZXlPOXBpbXhWUWk4N1VOcllpMnpDdm16c3ZNcWFDQ3ZGc0Vyb1JYUA==/1)

* https://www.techgig.com/files/default-icon.png

##### [Goutham Garipally](https://www.techgig.com/gouthamgaripally4)5 days ago

I am unable to change the compiler

[00Add Reply](javascript:void(0);)

[**View all 1 replies**](https://www.techgig.com/codegladiators/question/YVJxbERyZFovYW9NMXpGelRwNFpsYjBkZXlPOXBpbXhWUWk4N1VOcllpMnpDdm16c3ZNcWFDQ3ZGc0Vyb1JYUA==/1)

* https://www.techgig.com/files/default-icon.png

##### [Varun Kamani](https://www.techgig.com/varunkamani4)5 days ago

can not change the compiler

[00Add Reply](javascript:void(0);)

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##### [Varun Kamani](https://www.techgig.com/varunkamani4) Varun Kamani 5 days ago

not copy my code which i have written in my local machine

[00Add Reply](javascript:void(0);)

* + - 

##### [Varun Dundlodia](https://www.techgig.com/varundundlodia) Varun Kamani 5 days ago

Without allowing your web-cam you wouldn't be allow to write anything in the coding editor. First check the web-cam setting and then try to type in the coding editor.

[10Add Reply](javascript:void(0);)

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##### [Prathik Diwakar](https://www.techgig.com/prathikdiwakar)5 days ago

How much is the time limit per test case for this?

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##### [Subham Ghosh](https://www.techgig.com/subhamghosh4)5 days ago

what does this means? **Bob wants to catch salmons no more than twice**

[00Add Reply](javascript:void(0);)

* + 

##### [Gahan](https://www.techgig.com/gahan)Subham Ghosh 5 days ago

bob will attempt to eat salmons at most twice. so you need to find maximum number of salmon bob can eat just in two attempt.

[20Add Reply](javascript:void(0);)

* https://www.techgig.com/files/default-icon.png

##### [Piyush Agarwal](https://www.techgig.com/piyush211)5 days ago

Hello,  
M unable to change language form c to python3

[00Add Reply](javascript:void(0);)

* + https://www.techgig.com/files/default-icon.png

##### [Piyush Agarwal](https://www.techgig.com/piyush211) Piyush Agarwal 5 days ago

my code editor is not giving response, m even unable to write anything in it

[00Add Reply](javascript:void(0);)

##### [Varun Dundlodia](https://www.techgig.com/varundundlodia) Piyush Agarwal 5 days ago

 Without allowing your web-cam you wouldn't be allow to write anything in the coding editor. First check the web-cam setting and then try to type in the coding editor.

[00Add Reply](javascript:void(0);)





1

2

3

4

5

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7

/\* Read input from STDIN. Print your

    output to STDOUT\*/

#include<stdio.h>

int main(int argc, char \*a[])

{

//Write code here

}

NORMALLine: 7Col: 1

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[see warning log!](javascript:void(0);)