not exiting while loop with cin as condition c++

I know that this is a common question but i could not find any solution to this question without using vectors and ctrl + d/c. I have encounter a infinite while loop while using cin to get a unknown amount of integer. the while loop does not stop executing even after a enter in pressed. Thanks a lot!

```
while(cin >> num)
{
    num--;
    sizeB = 0;
    setB[sizeB] = num;
    sizeB++;
}
cin.ignore();
cin.clear();
```

| c++ | while-loop | cin | infinite |

edited Jul 17 '14 at 12:57   asked Jul 17 '14 at 12:07

                                                             Aurora_rainbow
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Whitespace is ignored in formatted input operations. A newline is whitespace. Maybe you want to use `getline` instead? – Zeta Jul 17 '14 at 12:11

If `num` is an integer than typing letters and pressing Enter will cause the loop to exit – M.M Jul 17 '14 at 12:23

1   @MarcoA the condition is `cin . ( operator>>` returns reference to `cin`). It's equivalent to doing `!cin.fail()` , i.e. check that neither end-of-file occurred, nor that something was typed which failed to be converted to the type of `num` . – M.M Jul 17 '14 at 12:24

@Zeta I am sorry i could not use getline as if i use get line it will be read all the values as one sentence. – Aurora_rainbow Jul 17 '14 at 12:26

@MattMcNabb I'm not used to this usecase, that's definitely true (cplusplus.com/reference/ios/ios/operator_bool). To be precise `'does not return the same as member good, but the opposite of member fail'` – Marco A. Jul 17 '14 at 12:27
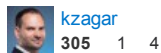
2 Answers

It is possible to use getline function to get data line-by-line, then read values via a stringstream:

```
#include <iostream>
#include <stdio.h>
#include <sstream>

using namespace std;

int main() {
  string line;
  while(getline(cin, line)) {
    stringstream str_stream(line);
    int num;
    while(str_stream >> num) {
      cout << "..." << num << "..." << endl;
    }
    cout << "----" << endl;
  }
}
```

answered Jul 17 '14 at 12:22

kzagar
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Thanks a lot! because i did not learn stringstream before so i am a bit confuse but understand it now. –
Aurora_rainbow Jul 17 '14 at 12:56

`while` takes a bool argument. In your code, `cin >> num` returns an `istream&`, that is converted calling `istream::operator bool()` (and I'd guess evaluates to `true` if the stream is not closed)

read a string and convert it to int, break when the string is empty:

```cpp
while (1) {
    std::string theString;
    std::getline(std::cin, theString);
    if (theString.empty())
        break;
    int num= atoi(theString.c_str());
    ...
}
```

answered Jul 17 '14 at 12:17

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While this is true, it doesn't answer the (implicit) question yet. – Zeta Jul 17 '14 at 12:18