```cpp
// IO_1.cpp : Defines the entry point for the console application.
//    Testy na rozne sposoby odczytu danych

#include "stdafx.h"
#include <iostream>
using namespace std;

template <typename T>
void checkfilestate(T &stream)
/*=======================================================
T == ifstream || T == ofstream || T == fstream
=======================================================*/
{
      ios_base::iostate st = stream.rdstate();
      if( st & ios_base::eofbit)
            cout << "EOF achieved\n";
      else if(st & ios_base::failbit)
            cout << "nie fatalny blad I/O\n";
      else if( st & ios_base::badbit)
            cout << "fatalny blad I/O\n";
}



int _tmain(int argc, _TCHAR* argv[])
{
      int i;
      size_t pos;
      char str[512];
      memset((void *)str, 0, sizeof(str));
      cout << "Input any integer or any character\n";
      cin >> i;
      if(cin.fail())
      {
            cout << "incorrect convertion to int" << endl;
            checkfilestate(cin);
            system("pause");
            cin.clear();
            //oczyszczamy cin
            cin.ignore(sizeof(str), '\n');
      }
```

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	else
	{
		cout << " i = " << i << endl;
	}

	cout << "\nTest for method std::basic_istream get()\n";
	cout << "Input any string and finish by CTRL+Z\n";

	pos = 0;
	while(!cin.fail() && !cin.eof() && pos < sizeof(str))
	{
		cin.get(str[pos]);
		pos++;
	}

	checkfilestate(cin);
	cin.clear();

	cout << "cout << str << endl\n";
	cout << str << endl;

	cout << "Test for method std::basic_ostream put()\n";;

	cout << "string:\n";
	pos = 0;
	size_t len = strlen(str);
	while(!cout.fail() && !cout.eof() && pos < strlen(str))
	{
		cout.put(str[pos]);
		pos++;
	}
	cout << endl;

	checkfilestate(cin);

	system ("pause");

	return 0;
}
```