dereference.cpp

```cpp
/**
 * show a pointer variable's
 * 1. actual address
 * 2. immediate contents
 * 3. contents to which it points (dereferencing it)
 * @author Jon Beck
 * @version 15 January 2020
 */

#include <iostream>
using namespace std;

int main()
{
  int value = 4216;
  int* value_pointer = &value;

  cout << "value_pointer's location in memory:\t" << &value_pointer << endl;
  cout << "value_pointer's immediate value:\t" << value_pointer << endl;
  cout << "value_pointer's dereferenced value:\t" << *value_pointer << endl;
  cout << "value's location in memory:\t\t" << &value << endl;
  cout << "value's immediate value:\t\t" << value << endl;

  return 0;
}
```