Object Oriented Programming with C++
Homework 1

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1   Question 1

The program below is supposed to print "Yes" if the two inputs are equal, "No" otherwise.

```cpp
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5    int a,b;
6    cin >> a >> b;
7    if (a = b)
8      cout << "Yes" << endl;
9    else
10     cout << "No" << endl;
11 }
```

1. For what values of a and b will the program print "Yes"?

2. Does the program work as mentioned? If not, what is the bug?

2   Question 2

1. How is a reference variable different from a pointer variable?

2. C++ favors the use of reference to pointer. Can a reference variable take a `null` value?

3. What is the difference between C-style strings and C++ style-strings ?

4. What is a namespace? Why are they useful?

5. The program fragment `auto a; cin >> a;` throws a compilation error `a is not initialized`. How do you fix this error?