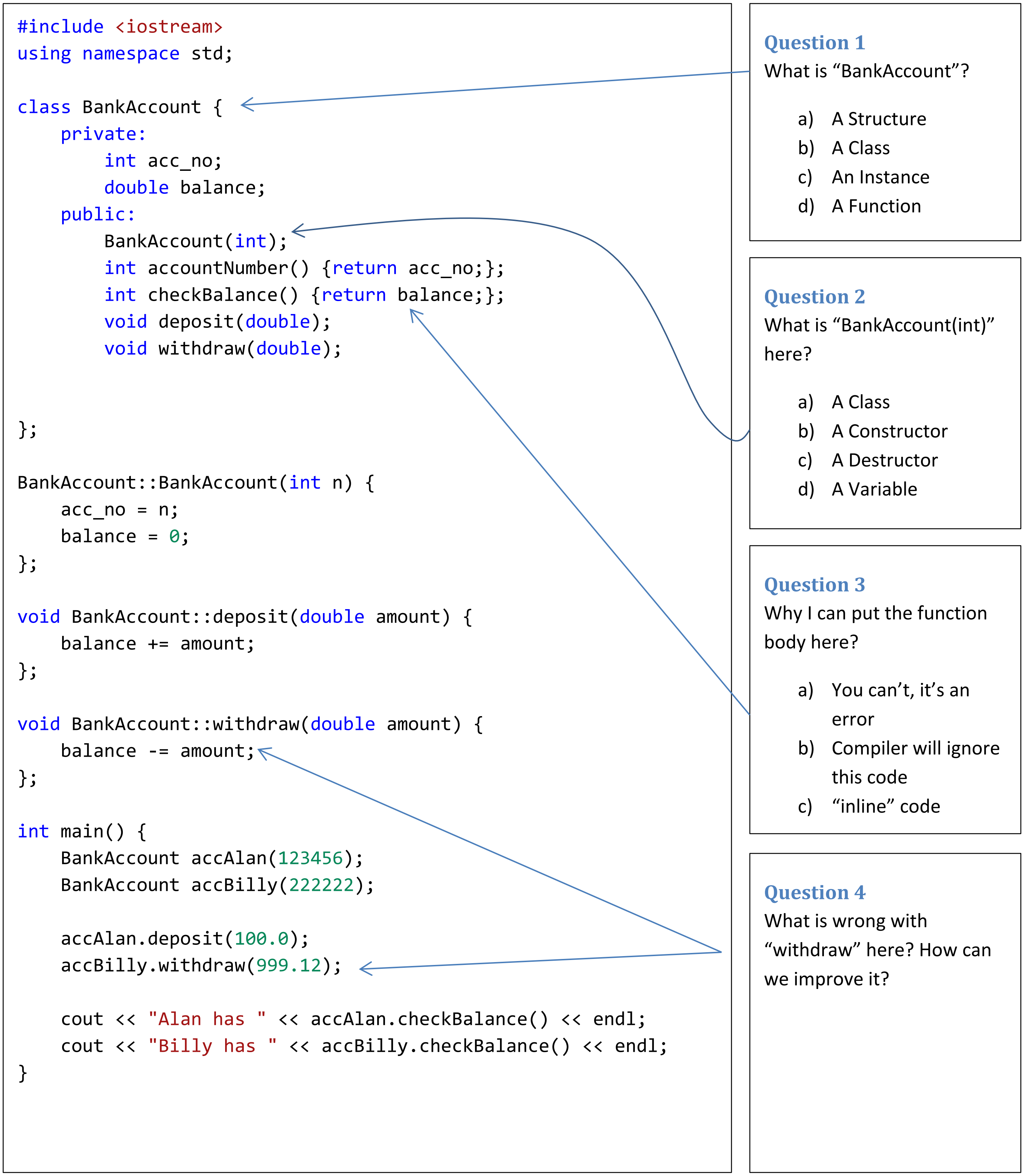
TIC 2001 Data Structures and Algorithms Quiz 0 (Not Graded)



```
#include <iostream>
using namespace std;

class BankAccount {
    private:
        int acc_no;
        double balance;
    public:
        BankAccount(int);
        int accountNumber() {return acc_no;};
        int checkBalance() {return balance;};
        void deposit(double);
        void withdraw(double);


};

BankAccount::BankAccount(int n) {
    acc_no = n;
    balance = 0;
};

void BankAccount::deposit(double amount) {
    balance += amount;
};

void BankAccount::withdraw(double amount) {
    balance -= amount;
};

int main() {
    BankAccount accAlan(123456);
    BankAccount accBilly(222222);

    accAlan.deposit(100.0);
    accBilly.withdraw(999.12);

    cout << "Alan has " << accAlan.checkBalance() << endl;
    cout << "Billy has " << accBilly.checkBalance() << endl;
}
```

Question 1

What is “BankAccount”?

a) A Structure
b) A Class
c) An Instance
d) A Function

Question 2

What is “BankAccount(int)” here?

a) A Class
b) A Constructor
c) A Destructor
d) A Variable

Question 3

Why I can put the function body here?

a) You can’t, it’s an error
b) Compiler will ignore this code
c) “inline” code

Question 4

What is wrong with “withdraw” here? How can we improve it?

```
#include <iostream>
using namespace std;

int main() {
    int *ptr;

    *ptr = 1;
}
```

Question 5

For the code in the left, match the types of the variables on the left:

ptr	●	●	An integer
*ptr	●	●	A Pointer of Integer
&ptr	●	●	A Pointer of pointer of integer

Question 6

What is wrong with this code above? How to add one line to correct it?

```
function1(int a)
{
  a = 10;
}
function2(int& a)
{
  a = 10;
}
function3(int* a)
{
  *a = 10;
}
int main()
{
  int x1 = 1;
  int x2 = 1;
  int x3 = 1;
  function1(x1);
  function2(x2);
  function3(&x3);
  cout << x1 << endl;
  cout << x2 << endl;
  cout << x3 << endl;
}
```

Question 7

What is the output of the code on the right?