1. Gambler’s Ruin is the probability that the gambler must be lose when the number of games is extremely increasing. Gambler starts with stake and places 1 fair bets until going broke or reaching goal. Show the wins of trials by using **do-while loop**. (03. CPP\_Flow)

Input

The first line of input contains the message “Put stake, goal and trials”. The second line of input contains the integer stake, goal, trials.

Output

Output the wins of trials

Answer. (답안예시)

텍스트이(가) 표시된 사진

자동 생성된 설명텍스트이(가) 표시된 사진

자동 생성된 설명

2(CPP\_Modulatrity)

int x;

int y=20;

int f(){

int x;

x = 10;

for (int I =0; i<y; I++){

x = x + 1;

}

{ int x = y;

++x;

}

}

텍스트이(가) 표시된 사진

자동 생성된 설명

1) Look at the code above and write down which scope the following variables represent

First line x:

Second line y:

4th line f :

6th line x :

8th line i :

14th line x :

2) How many different x's are declared in the code? And What is the final value of x after looking at the code?

3(CPP\_Modularity)

1. Explain the similarities and differences between class and structure.

2. Describe the three access specifications of the class, and describe each definition.

4. Use constructor and destructor of the class, and write the code by inheriting the derived class in the base.

There are two classes (**AType** and **BType**) that must be used. **AType** and **BType** are **inheritance relations**, and we don't know who is **BASE** or **DERIVED**. The **constructor** and **destructor** are called in each class, and the **strings** that must be referred to in the constructor and destructor are “**AType** **Constructor**”, “**AType** **Destructor**”, “**BType Constuctor**” and “**BType Destructor**”. In addition, the main function is given, and a new function **LocalType** must be created. Within the **LocalType**, “**LocalType Start**” and “**LocalType Finish**” should be declared in the form of a string. and the class is called to produce the result in **LocalType** as shown in the figure.” Write the correct code! (A and B must be inheritance!!)

**Code**

**# include <iostream>**

**using namespace std;**

**// make two classes(AType, BType)**

**class AType{**

**//write the code**

**};**

**class BType{**

**//write the code**

**};**

**void LocalType() {**

**// Call only one class**

**}**

**int main() {**

**cout << "main start" << endl;**

**LocalType();**

**cout << "main end" << endl;**

**}**

텍스트이(가) 표시된 사진

자동 생성된 설명

**Result**

텍스트이(가) 표시된 사진

자동 생성된 설명