```
***************************** MAIN.CPP ************************************

#include <iostream>
// for srand function
#include <stdlib.h>
// for time function
#include <ctime>
// for set precision function
#include <iomanip>

#include "header.h"

using namespace std;

int main(void)
{


    // Initialize random number generator
    srand((unsigned)time(NULL));

    cout << "\nRandom number between 0 and 27 (27, exclusive): " <<
GetRandomNum(27);

    cout << "\nRandom number between 3 and 73 (3 and 73 exclusive): " <<
GetRandomNum(3, 73);


      cout << "\nRandom number between 0.000 and 1.000: " << setprecision(3) <<
GetRandomNum();

    cout << endl;

    system("pause");

    return 0;
}







********************************** FUNCTIONS.CPP
************************************************



// for rand function
```

```
#include <stdlib.h>
// for time function
#include <ctime>

#include "header.h"

int GetRandomNum(int m)
{
    // generates a random int between 0 and (m - 1)
    int random_number = rand() % m;
    return random_number;
}

int GetRandomNum(int i, int j)
{
    // generates a random int between (i + 1) and (j - 1)
    int random_number = (i + 1) + (rand() % (j - i - 1));
    return random_number;
}

double GetRandomNum()
{

    // both rand() and RAND_MAX return ints so we need to cast at least one of them
to a double to get a double
    double random_double = (double)rand() / RAND_MAX;

    return random_double;
}
```

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******************************** HEADER.H
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```
#ifndef _HEADER_H_
#define _HEADER_H_

int GetRandomNum(int);

int GetRandomNum(int, int);

double GetRandomNum();
```

```
#endif
```