Program1

```
//20191128 Jian Park
#include <iostream>
using namespace std;

int main() {
  int a, b, sum=0;

  cin >> a >> b; // input two numbers a and b
  for(int i=a; i<=b; i++){ // when i is b from a
    sum=sum+i; // add i to sum
  }
  cout << sum << endl; // output sum
  return 0;
}</pre>
```

To get the sum of all integer numbers use for loop.

Program2

```
//20191128 Jian Park
#include <iostream>
#include <cmath>
#include <iomanip>
using namespace std;

int main() {
   double a;

   cin >> a; // input real numbe a
   cout << fixed << setprecision(6) << sqrt(a) << endl; // output square root of number a
   return 0;
}
```

'setprecision(6)' with 'fixed' is print floats with 6 digits after the decimal.

And sqrt(a) function is get square root of a.

Program3

```
//20191128 Jian Park
#include <iostream>
#include <cmath>
#include <cstdlib>
#include <ctime>
using namespace std;

int main() {
    srand(time(0)); // set seed is time(0)
    for(int i=0;i<3;i++){ // output three times
        cout << fixed << setprecision(6) << rand()/(float)RAND_MAX << ' ';
    // to make 0~1, division by RAND_MAX
}
    return 0;
}
```

To make different random number for all run time, set seed is time(0).

And to get 0~1 range, division by RAND_MAX that max number for rand().