Preparation for the Coding Exam

Algorithms and Data Structures

The coding exam is a written exam, but you need to write a program on your workstation (or PC if you are allowed) and fill in the answer sheet with the answers you get from running it.

You may reuse programs that you have written yourself (e.g., the programs used in the exercises). The test data for the questions (A.txt, B.txt, ..., L.txt) are stored in /home/XXXX/XXXXX/XXX/XXXX. (the path will be given in the examination sheet).

For practice, let's solve the following problem in advance.

Problem A

The test data /home/course/alg1/common/practice/A.txt contains 10 numbers separated by a new line. Find the sum of these numbers.

For example, let's create a program A.c in C language like this:

```
#include<stdio.h>
int main(){
  int i, x, sum = 0;
  for ( i = 0; i < 10; i++ ){
    scanf("%d", &x);
    sum += x;
  }
  printf("%d\n", sum);
  return 0;
}
```

Compile A.c by the following command and generate the executable file a.out.

```
gcc A.c
```

Execute the program with the following command.

```
./a.out < /home/course/alg1/common/practice/A.txt
```

If "123456" is output, you have succeeded. Write it ("123456") in the box of the answer sheet.