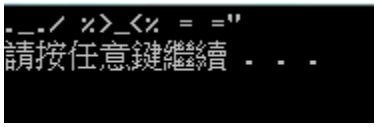
Introduction to Computers and Programming LAB-2 2014/09/24

- ✧ You cannot use **Selection Statements** (if, else …) or **Iteration Statements** (for, while) even if you have learned them.
- ✧ Your output must be in our sample output format.

1. Please write a program to print the following emoticon on the screen:
   ._./ %>_<% = ="

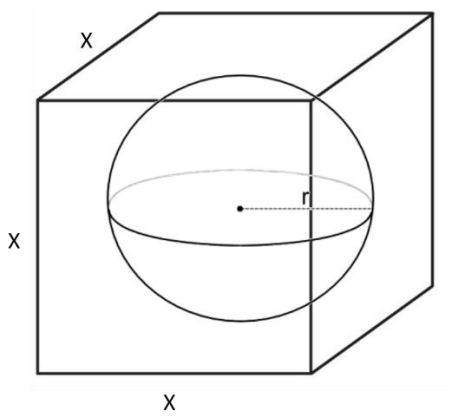


2. Please finish the following program whose output is the same as the sample image.
   ※Note: You **cannot** use zero or blank characters in your *printf* function.

```
#include<stdio.h>
#include<stdlib.h>

int main()
{
	int year=2014,month=9,day=24,hour=7,minute=31,second=8;

    /* Please write your code here */

	system("pause");
	return 0;
}
```

3. Here is the cube within a spherical hollow. The side length of cube is X, the radius of the inside sphere is r. Please write a program to let user input X and r, then calculate volume of the cube.
   Note:
   1. Please practice using the **Macro Definition** to define the value of π as 3.14159,
   2. The answer must be rounded to third place after the decimal point.

   Formula of sphere volume: $V = \frac{4}{3}\pi r^3$




```
Please enter the side of the cube: 5
Please enter the radius of the sphere: 2
the volume of the cube with spherical hollow is: 99.867
請按任意鍵繼續 . . .
```

4. Please write a program to get two fractions from the user, and calculate the product of these two fractions. Please show the answer as a mixed fraction.

```
Please input fraction X (ex.1/2):5/1
Please input fraction Y (ex.1/2):1/2
The answer is : 2 1/2
```

```
Please input fraction X (ex.1/2):1/3
Please input fraction Y (ex.1/2):1/2
The answer is : 0 1/6
```

5. (Bonus) Write a program that asks the user to enter a float number and rounds it to the nearest integer.

```
Enter a float number: 200.5
The number after rounding is: 201
--------------------------------
Process exited with return value 0
Press any key to continue . . .
```

```
Enter a float number: 2.499
The number after rounding is: 2
--------------------------------
Process exited with return value 0
Press any key to continue . . .
```