Exercise 1 : (Course)
Write the program that determines the maximum between two integers using the two forms of the if...else statement.

Exercise 2 : (Course)
Write a program that reads the temperature of the water then displays the physical state of the water (gas, liquid, or solid).

Exercise 3 : (Course)
Write a program that allows you to read the time as two integers h, m which represent hours and minutes, then calculates and displays the time before 30 minutes.

Exercise 4 : (Course)
A student has three homework assignments to prepare. If he does the first one, he will get **1 point**; and if he does the second one, he will get **1.5 point**. Write a program that calculates the number of points collected by the student.

Exercise 5 : (Course)
- Write a program that converts a value of the metric system given in value of the American measurement system.
- The user has the choice to provide a measure to your algorithm in meters, grams or Celsius degrees and you should convert it to feet, pounds or degrees Fahrenheit. (Remember to use the instruction “Case of")
- Here are the conversion rules to use :
  - ✓ 1 foot = 0.3048 meters
  - ✓ 1 gram = 0.002205 pounds
  - ✓ Fahrenheit degree temperature = 32 + (1.8*temperature in degrees Celsius).
- *Example :* 12.3 m = 40.35 feet

Exercise 6 : (Course)
Write a program that calculates the square root of a given integer, and its absolute value.

Exercise 7 : (DW)

Consider the following part of code :

```
scanf("%d%d%d",&A, &B, &C);
if (A>0 && B<=10) {
     C--;
     if (B>0 || C!=5) {
          B-=5;
          A-=2;
     }
     else      C*=2;
}
else {
     if (C>10 || B>3)   C=B-3*C;
     B=B-C;
}
if(A==1 || B==0 || C==1)     C=A+B;
B=C+A*B;
```

- Complete the following table which represents an execution trace of the previous code following 4 cases (the first case is given as an example) :

Case	Instructions to execute	A	B	C
a) A=3, B=5, C=1	***scanf("%d%d%d",&A, &B, &C)***	~~3~~	~~5~~	~~1~~
	C--;	~~3~~	~~5~~	~~0~~
	B-=5 ;	~~3~~	~~0~~	~~0~~
	A-=2;	~~1~~	~~0~~	~~0~~
	C=A+B;	~~1~~	~~0~~	~~1~~
	B=C+A*B;	**1**	**1**	**1**
b) A=2, B=0, C=6				
c) A=0, B=5, C=1				
d) A=0, B=1, C=1				

Exercise 8 : (DW)

Write a program which: reads 2 integers, reads an arithmetic operator among (-, +, /, *), applies the operator read to the two numbers read and displays the result taking into account the cases of errors (Example : division by 0, invalid operator…).

Exercise 9 : (DW)

Write a program that asks for the time in the form of 3 numbers (in hours H, minutes M, and seconds S), then check if the time is valid, then say what the time will be after 30 seconds in the valid case.