Revision Exercises

Question 1: Write down the output produced by each segment of code below:

(a)	```int a = 5, b = 3, c = 0;```
	 ```a = a - b;```
	 ```c = (2 + c) * a;```
	 ```c++;```
	 ```printf("a = %d\n", a);```
	 ```printf("b = %d\n", b);```	

(b)	```int a = (int)(-6.0 + 0.1);```
	 ```double x = 5 / 2 * 4.0;```
	 ```printf("a = %d\n", a);```
	 ```printf("x = %d\n", x);```	

(c)	```int x = 1, y = 0;```
	 ```if (2 == x == y)```
	 ```printf("//A\\\n");```
	 ```printf("//B\\\n");```
	 ```printf("//C\\");```	

(d)	```int A[10] = { 1, 2, 3 }, i = 4;```
	 ```printf("%d\n", A[3]);```
	 ```while (i >= 1) {```
	 ``` A[i] = A[i-1] * 2;```
	 ``` i--;```
	 ```}```
	 ```printf("%d\n", A[3]);```	

Question 2: Write a FULL C program (complete with <header file> inclusion and main function declaration) to input three integers, X, Y, and Z. You may assume they are non-negative integers. Your program should produce output based on the following rules:
- If the rightmost digit of X is either 2 or 7, print "A";
- If one of the numbers is equal to the sum of the other two numbers, print "B";
- If X is not less than Y or Y is not divisible by 3, print "C";
- If the input values satisfy all the above conditions, print "D";

Note: These rules are NOT exclusive.

Sample Output (underlined characters are input entered by the user)

```
Input X, Y, Z: 12 20 8
ABCD
```