TP 5: Conditional structures (continued)

2. the conditional structure "Switch":

The conditional structure **Switch** allows you to select a set of instructions to execute from several choices. It is written in C++ language as follows:

> **switch** (expression)
>
> **{**
>
> **case** value 1:<instruction block 1>
>
> **break;**
>
> **case** value 2: <instruction block 2>
>
> **break;**
>
> **case** value 3: <instruction block 3>
>
> **break;**
>
> **default:** <default instruction block>
>
> **}**

Noticed :

> ➢ The expression in parentheses must be of type **integer** Or **character**.
>
> ➢ The **case value** can be a constant value, or a constant expression (which contains constants) of the same type as the expression of **switch.**
>
> ➢ The default part is optional; it is executed in the case where the value of the expression does not correspond to any of the values found in the "**case value**".
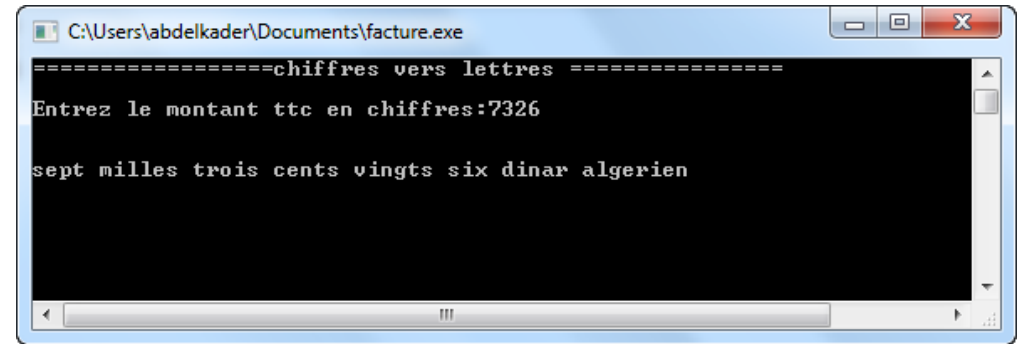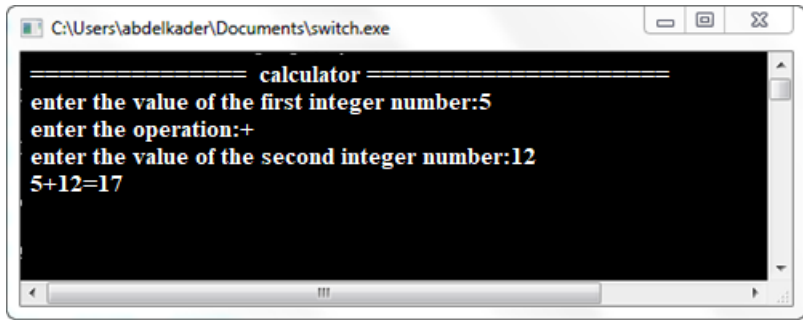
> ➢ The instruction "**break;";**is essencial, she allows you to exit the **switch** structure once we execute the block of instructions of a **box value.**

Example :

Algorithmic language	C++ language
Read(wilaya)**;**	**Cin >>**wilaya**;**
Switch (wilaya)	**switch** (wilaya)
case 1: Write ("ADRAR");	**{**
case 2: Write ("CHLEF");	**case** 1: cout << "ADRAR";
//	**break;**
//	**case** 2: cout << "CHLEF";
case 58: Write (" El MENIA");	**break;**
else : Write ("This number does not exist");	**//**
End case;	**case** 58: cout << " El MENIA";
	break;
	default: cout << "This number does not exist";
	}

Exercise 1 :

Write a C++ program named *calculator* allowing the reading of a first integer *A*, the operation (+ or – or * or /: are characters) and the second integer *B*, then displays the result as follows:

```
C:\Users\abdelkader\Documents\switch.exe

================ calculator ================
enter the value of the first integer number:5
enter the operation:+
enter the value of the second integer number:12
5+12=17
```

```
C:\Users\abdelkader\Documents\facture.exe

================chiffres vers lettres ================

Entrez le montant ttc en chiffres:7326


sept milles trois cents vingts six dinar algerien
```

Exercise 2:

The following image represents a capture of part of an invoice:

	Montant HT		4 170,00 €
	TVA	20%	
	Montant TTC		5 004,00 €
		Soit	
		Cinq mille quatre Euros	

1) Write a C++ program which asks the user for the Amount including tax of an invoice in figures (**rank of thousands at most**) then it displays it in letters. The display should be as follows: