

« Programming »

* Lecture 2 *

- How to write a program?

* C++ Language is "Case Sensitive". « A ≠ a »

Ex: int A;
a = 10;

Error: « a is undeclared. » غير معروفة.

* Reserved Words: int, float, cin, cout, if, for, ...

- all reserved words must be written in Small Letters.

→ Declaration must start with a letter not a number.

- Program Shape:

Library
main ()

{
Program

}

- Example: #include <iostream.h>
int main ()

{
cout << "Benisuef university";
cout << "Faculty of Computers and info Systems";
cout << "First Level";
}

Benisuef university Faculty of Computers and info systems First Level

* Notes:-

(.h) → header file (written instead of "using namespace std")
(iostream) → input/output library.

Libraries: iostream, math.h, iomanip, string

to move to the next line, use endl or "\n".
endl means Endline.

Example: #include <iostream.h>
int main ()

```
{  
    cout << "Benisuef university \n";  
    cout << "Faculty of Computers and info systems" << "\n";  
    cout << "First Level" << endl;  
}
```

Benisuef university
Faculty of Computers and info systems
First Level.

- To move 8 spaces, use "1t"
- To move one space, use an empty double quotation.

Example: `cout << "A1t" << "B" << " " << "C";`

A	B C
---	-----

* Write a program to Find Sum of 2 numbers.

1. Inputs a, b
2. processing $C = a + b$
3. output C

- program: `#include <iostream.h>`
`int main()`

```
{
    int a, b, c;
    a = 10;
    b = 30;
    C = a + b;
    cout << C;
}
```

غير مفيد

40

→ it is better to write: `cout << "Sum =" << C;`

Sum = 40

جذاب

<< 3 >>

Write a program to find Sum of any 2 numbers :-

```
#include <iostream.h>
main ( )
```

```
{
```

```
int a, b, c;
```

```
cout << "please enter first number \n";
```

```
Cin >> a;
```

```
cout << "please enter second number \n";
```

```
Cin >> b;
```

```
c = a + b;
```

```
cout << " Sum = " << c;
```

```
}
```

Write a program to find Area, perimeter of a Square :-

```
#include <iostream.h>
main ( )
```

```
{
```

```
int A, P, S;
```

```
cout << "please enter length of Side \n";
```

```
Cin >> S;
```

```
A = S * S;
```

```
P = S * 4;
```

```
cout << " Area of square = " << A;
```

```
cout << " perimeter of square = " << P;
```

```
}
```