



## =====MAIN=====

```
Project {  
Int main(void){  
#here goes the code#  
}  
}
```

## =====DATATYPE=====

```
Int → Int  
dobl → Double  
bol → Boolean  
str → String
```

## =====DECLARATION OF VARIABLES =====

```
A: int;    B: dobl;    C: bol;    D: str;    A,B,C: str;
```

## =====INITIALIZED VARIABLES =====

```
AA: str = "hello";    Cadena: str = "";  
Boleano: bol = true;    Boleano: bol = false;  
Numero: int = 1;  
Decimal: dobl = 0.12;
```

## =====COMMENTS=====

To comment a line (##):

```
## this is a comment
```

to comment on a paragraph (#):

```
# this is other
```

```
Comment #
```



## =====OPERATORS=====

Logical\_operator: [**and** | **or**]

Relational\_operator:[< | > | == | >= | <= | !=]

Condition: [**A operator\_relational B**]

## =====SENTENCES=====

### Print:

```
print("hello world");  
print("hello world" + "world" + variable);  
print(variable);
```

### FOR:

```
for: 0:10{  
}  
for(i:int=0;i<numero;++){  
}
```

### IF:

```
if: condition{  
}  
if: condition logical_operator condition{  
}
```

### Example:

```
if: a<b{  
}  
if: a == "hello" and b>0 or b<5{  
}
```



## IF-ELSE:

```
if: condition{  
}  
else{  
}
```

## DO-WHILE:

```
do:{  
}while: condition;
```

```
do:{  
}while: condition logical_operator condition;
```

## SWITCH:

```
switch: variable{  
case 1:{};  
case 2:{};  
}  
switch: str variable{  
case "hello":{};  
case "world":{};  
}
```

## WHILE:

```
while: condition{  
}  
while: condition logical_operator condition{  
}
```



## ===== ARITHMETIC OPERATIONS=====

```
a:dbl;
```

```
a=[operation];
```

```
=====
```

```
a:dbl=[operation];
```

```
=====
```

```
a:int;
```

```
a=[operation];
```

**Note:** There are errors when using operations of the form (a: int = [operation];) with variables of type int, it is recommended to try with variables of type dbl.

```
=====
```

```
a:dbl;
```

```
b:dbl;
```

```
c:dbl;
```

```
a=[b+c];
```

```
a=[c-b];
```

```
a=[c*b];
```

```
a=[c/b];
```



## Code Example:

```
ejemplo {  
  int main(void){  
    suma:dobl;  
    a:int=1;  
    b:int=1;  
    suma=[a+b];  
    resta:dobl;  
    a=3;  
    b=5;  
    resta=[a-b];  
    Operacion:dobl=[-(1+1*6/3-5+7)];  
    print("la suma es: "+suma+" la resta es: "+resta+"  
    operacion: "+Operacion);  
  }  
}
```

---

01/19/2021

- \* Lexical analysis working ( Analizar\_lexico\_presiso(); in Controller class ).
- \* Syntactic analysis working ( Analizar\_sintaxis(); in Controller class ).
- \* Incomplete compiler.
- \* There is no exact error capture.
- \* Only the following statements were compiled:
  - \* Declaration of variables.
  - \* Print ();
  - \* Arithmetic operations.