

Array Index out of bounds

```
program simpleProgram;
var
  arr : array [1..5] of integer;
  x, y : integer;
  result : integer;
  c : char;
  sum : integer;
BEGIN
  writeln("Hello Dr. Reza");
  x := 9;
  y := 6;
  arr[10] := 23;
```

```
-----
In assignment
-----
SET VAR VAL : 23
SET VAR TYPE : 23
ARRAY ID : arr[10]
INDIRECT ARRAY ACCESSING
ID sent to handle array indexing : arr[10]
not found
ERROR : Index out of bounds or variable does not exist
```

Implicit Type Coercion

```
program simpleProgram;
var
  arr : array [1..5] of integer;
  x, y : integer;
  result : integer;
  c : char;
  sum : integer;
BEGIN
  writeln("Hello Dr. Reza");
  x := c;
```

```
-----
In assignment
-----
SET VAR VAL : c
SET VAR TYPE : litchar
current ID x
set val : c
ERROR : Implicit conversion from char to : integer
```

Undefined Variable

```
-----
In assignment
-----
ERROR : undefined reference to : result1
-----
1 program simple;
2 var x, y : integer;
3 var result : integer;
4 var c : char;
5 BEGIN
6   x := 9;
7   y := 6;
8   c := 'L';
9   IF x > y then
10  begin
11    result1 := (x+y) * 6;
12  end
13  else
14  begin
15    result := (x+y) * 5;
16  end;
17
18  write('Result is: ');
19  writeln(result);
```

Result1 is not declared

Invalid Types

```
program simpleProgram;  
var  
    arr : array [1..5] of integer  
    x, y : integedr;  
    result : integer;  
    c : char;  
    sum : integer;
```

```
      In var delcaration for simpleProgram  
-----  
var : arr Type : array  
arr[1] : integer  
arr[2] : integer  
arr[3] : integer  
arr[4] : integer  
arr[5] : integer  
ERROR Invalid type : integedr
```