

Scope & Operators in Arduino

CSE- 315

Peripherals & Interfacing

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Scope

There are three types of scope in Arduino environment.

- Global Scope
- Formal Scope
- Local Scope

Global Scope:

```
Int T , S ;  
float c = 0 ; Global variable declaration  
void setup () {  
}  
void loop(){  
}
```

Formal Scope:

Suppose void A() is a function:

```
void setup(){
```

```
    Serial.begin(9600);
```

```
}
```

```
void loop() {
```

```
    int i = 2;
```

```
    int j = 3;
```

```
    int k;
```

```
    k = A(i, j); // k now contains 6
```

```
    Serial.println(k);
```

```
    delay(500);
```

```
}
```

```
int A( int x, int y){
```

```
    int result;
```

```
    result = x * y;
```

```
    return result;
```

```
}
```

Formal scope variable:



Local Scope:

- The variable which resides in the function only. So the variable can only be used in the function.
- These variables are not valid outside of the function.

```
Void loop () {  
    int x , y ;  
    int z ; //Local variable declaration  
    x = 0;  
    y = 0; // initialization  
    z = 10;  
}
```

Operators

There are five types of operator in Arduino:

1. Arithmetic Operator
2. Comparison Operator
3. Boolean Operator
4. Bitwise Operator
5. Compound Operator

Hand Notes

Please make sure to have a pen and paper with you.

- Resource Link- <https://www.arduino.cc/reference/en/>

Thank you