

# Arduino Reference Guide

## Basic Program Structure

```
void setup()
{

}

void loop()
{

}
```

## Comments

```
//Single-line comment
/*
  Multi-line comment
*/
```

## Pausing

```
delay(          );

delayMicroseconds(          );
```

## Setting Up Pins

```
pinMode(          ,          );
```

## Arithmetic Operators

=, +, -, \*, /, %

## GPIO

	Output	Input
Digital	digitalWrite(          ,          );	digitalRead(          );
Analog	analogWrite(          ,          );	analogRead(          );

## Comparison Operators

==, !=, <, >, <=, >=

## Data Types

int, float, double, boolean, char, string, byte, void

## Boolean Operators

&&, ||, !

## Control Structures

### If Else Statements

```
if(          )
{

}
else if(          )
{

}
else
{

}
```

### Switch Case

```
switch(          )
{
  case 1:
    //statements
    break;
  case 2:
    //statements
    break;
  default:
    //statements
}
```

### Do... While

```
do
{
  //statements
}while(          );
```

### For Loop

```
for(          ;          ;          )
{
  //statements
}
```

### While

```
while(          )
{
  //statements
}
```