



Chapter2 : Basics of Robot Programming

1 / Introduction to Arduino:

- Setup:** Install the Arduino IDE and configure the board.
- Basic Structure :**

```
void setup() {  
    // Initialization code  
}  
void loop() {  
    // Repeating code  
}
```

2/ First Projects:

- ▶ Blink an LED:

```
void setup() {  
  pinMode(13, OUTPUT);  
}  
void loop() {  
  digitalWrite(13, HIGH); // Turn LED on  
  delay(1000);           // Wait 1 second  
  digitalWrite(13, LOW); // Turn LED off  
  delay(1000);  
}
```

Control a servo motor using the Servo.h library.

3/ Python Programming:

- Control GPIO pins on Raspberry Pi.
- Example: Turn an LED on/off with a Python script.