

SIT 111 COMPUTER SYSTEMS

TASK 3.1P Arduino blinky project

Summary:

In this task I worked with a software called Arduino uno. This task focused on writing a small code and the objective was to make the LED bulb blink. The materials I required were

Arduino Uno (or similar Arduino board)

- LED
- 220-ohm resistor
- Breadboard
- Jumper wires
- USB cable to connect the Arduino to a computer
- Arduino IDE installed on the computer

I followed the sample circuit picture on the task sheet and formed the circuit in the same way. For this task the code was provided so all I did was read through the unit site about what commands to follow. For example

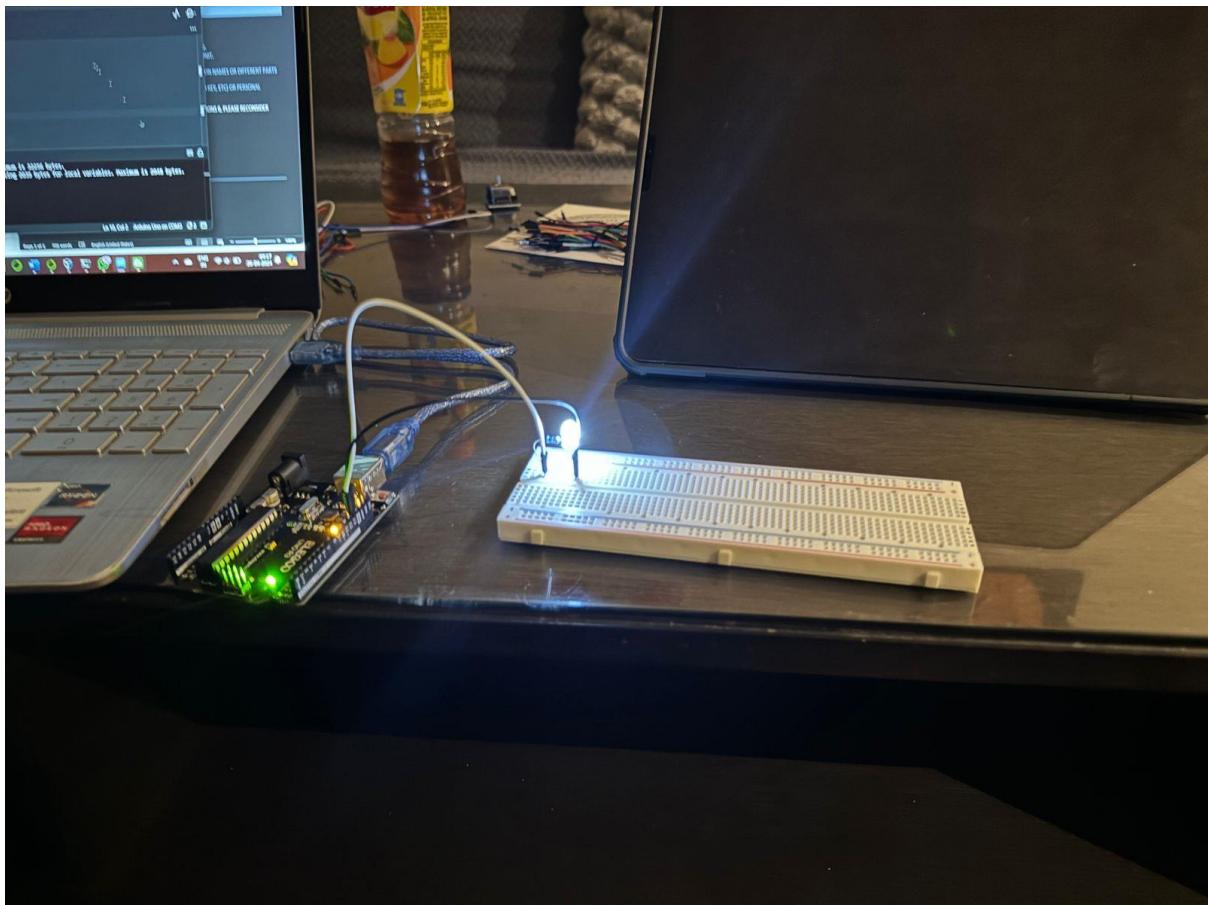
int (Integer): The integer data type is instrumental for working with whole numbers.

float (Floating-Point): UFloating-point data types are employed when precision with decimal point values is required. These data types accommodate real numbers with fractional parts.

char (Character): The character data type is used for storing individual characters, which can be letters, numbers, or symbols. It's invaluable when working with strings or textual data.

boolean: booleans are essential when dealing with binary logic and conditions. They represent either a true or false value, making them indispensable for decision-making in control structures like if statements.

Learning journey :



```
sketch_apr26a | Arduino IDE 2.3.3-nightly-20240422
File Edit Sketch Tools Help
Arduino Uno
sketch_apr26a.ino
1 const int ledPin=13;
2 void setup(){
3   pinMode(ledPin, OUTPUT);
4 }
5 void loop(){
6   digitalWrite(ledPin, HIGH);
7   delay(10);
8   digitalWrite(ledPin ,LOW);
9   delay(10);
10 }
```

Output

```
Sketch uses 922 bytes (2%) of program storage space. Maximum is 32256 bytes.
Global variables use 9 bytes (0%) of dynamic memory, leaving 2039 bytes for local variables. Maximum is 2048 bytes.
```

Ln 10, Col 2 Arduino Uno on COM3 0:2

Reflections :

How do you know you have achieved the learning goals?

I learned about the basic commands used in this task and also got familiar with the usage of Arduino uno. Got my hands on compiling the circuit and knowing about the components.

- What is the most important thing you learned from this and why?

For me, the most important thing was formation of the circuit, getting to know about the different components in the kit because it was a practical and a new experience for me.

- How does the content or skills learned here relate to things you already know?

I already knew about the coding for this task i.e the commands and inputs. It only deepens my understanding.

- Where or when do you think it will be useful?

Since it is quite practical and I could see the output working, it not only boosted my confidence but also helped me develop interest in hardware.

Youtube video link: <https://youtu.be/-9LID1dlQuE>