***Experiment - 3***

***Aim:-***

Interface a LED with the **ARDUINO** in **Proteus** and WAP in IDE to simulate the circuit

***Components:-***

1. ***Proteus***
2. ***ARDUINO***
3. ***LED***
4. ***ARDUINO IDE***

*PROTEUS: - The Proteus Design Suite is a proprietary software tool suite used primarily for electronic design*

*automation. The software is used mainly by electronic design engineers and technicians to create*

*schematics and electronic prints for manufacturing printed circuit boards.*

*Arduino UNO : The Arduino UNO is an open-source micro0controller board based on the Microchip*

*ATmega328P micro0controller and developed by Arduino.cc. The board is equipped with sets of digital and*

*analog input/output (I/O) pins that may be interfaced to various expansion boards (shields) and other*

*circuits.*

*ARDUINO IDE:-The Arduino Integrated Development Environment is a cross-platform application that is*

*written in functions from C and C++. It is used to write and upload programs to Arduino compatible-boards.*

***CODE:-***

*void setup() {*

*pinMode(12,OUTPUT); //to configure a specific pin to behave either as an input or an output*

*}*

*void loop() {*

*digitalWrite(12,HIGH); //write a HIGH or a LOW value to a digital pin*

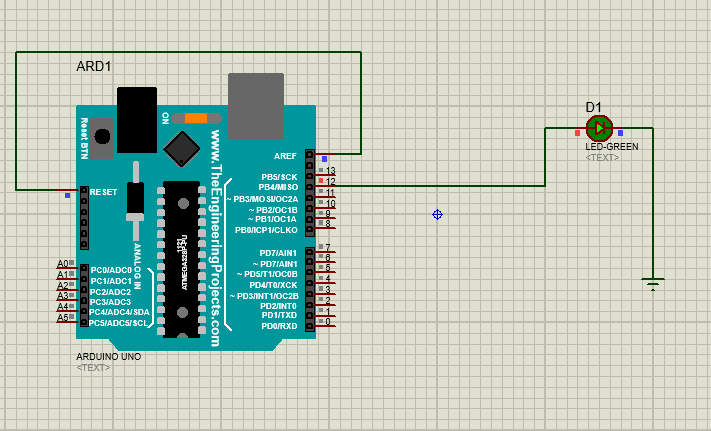
*delay(500); //pauses the program for the given amount of time (in milliseconds)*

*digitalWrite(12,LOW);*

*delay(200);*

*}*

***Simulation Circuit:-***



***Result:-***

The LED was lit successfully.