

Name J S MEGHANA

USN 1BM18CS039

Program no Week-7(2nd-Question)

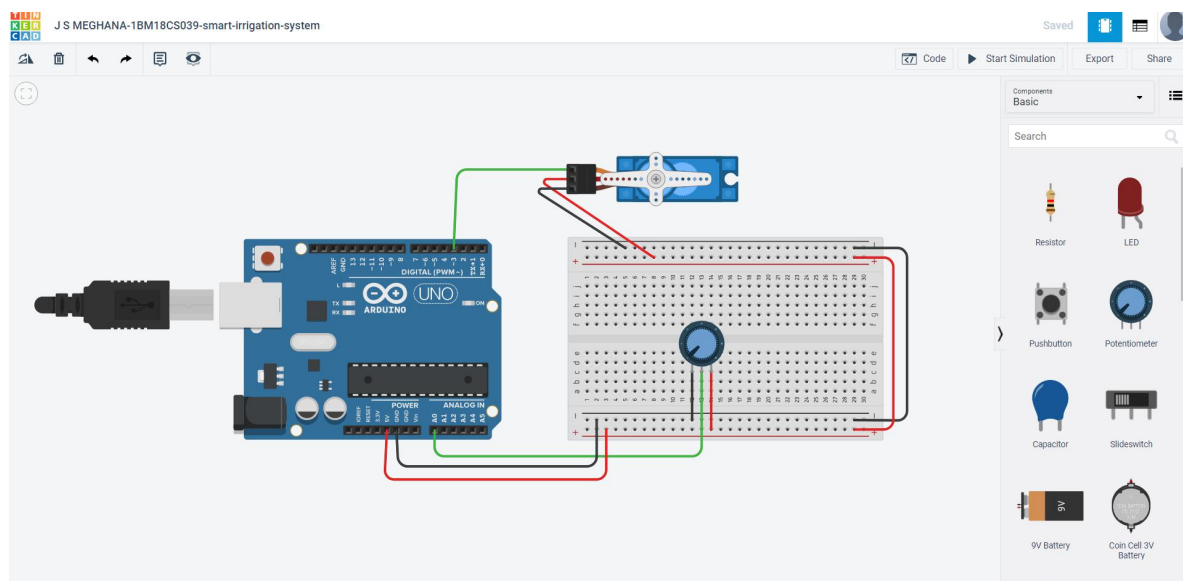
Program Title Smart Irrigation System

Aim: Design a smart irrigation system (Potentiometer and Servo Motor Shaft).

Hardware Required

1. Arduino Board
2. Bread Board
3. Micro Servo
4. Potentiometer

Circuit Diagram

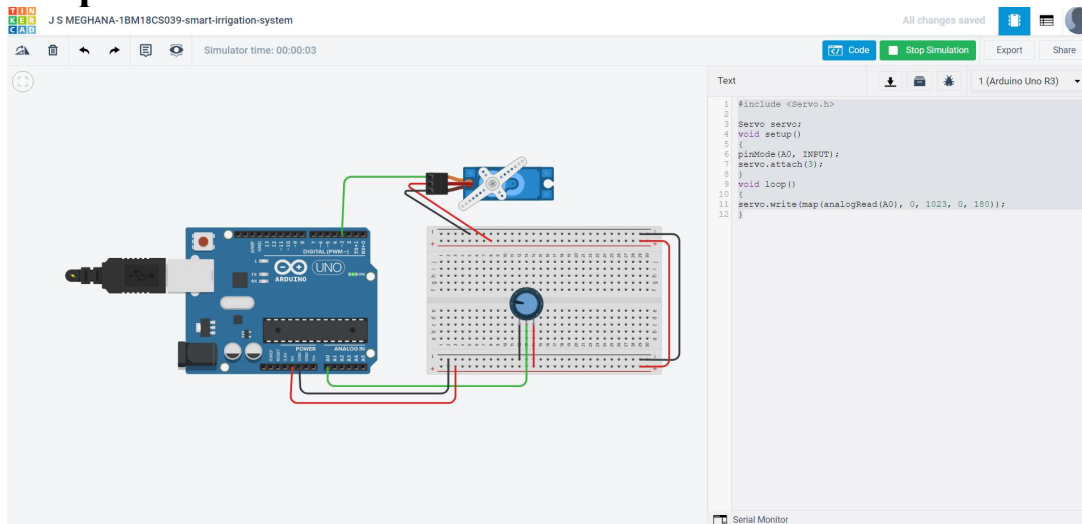


Code:

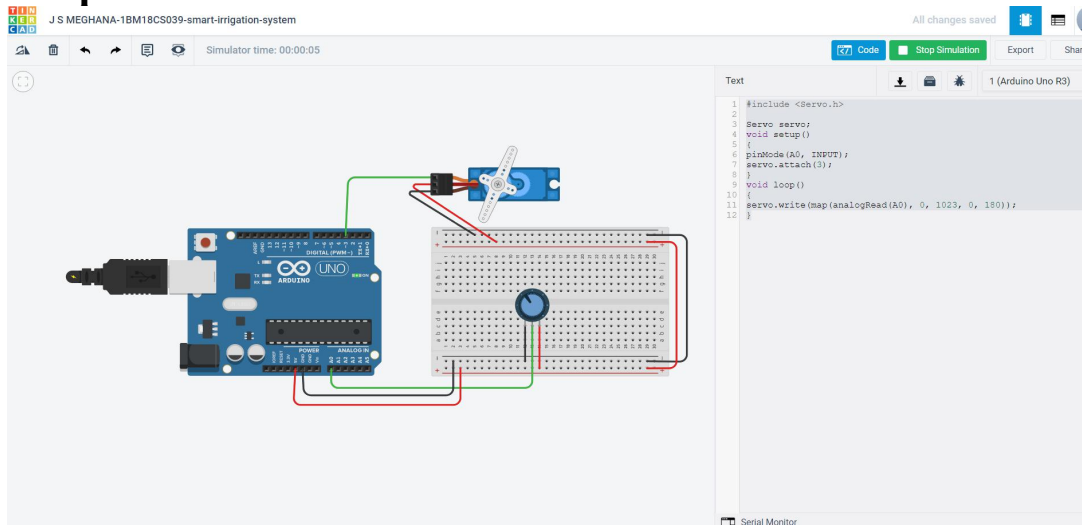
```
#include <Servo.h>
Servo servo;
void setup()
{
  pinMode(A0, INPUT);
  servo.attach(3);
}
void loop()
{
  servo.write(map(analogRead(A0), 0, 1023, 0, 180));
}
```

Observation /Output:

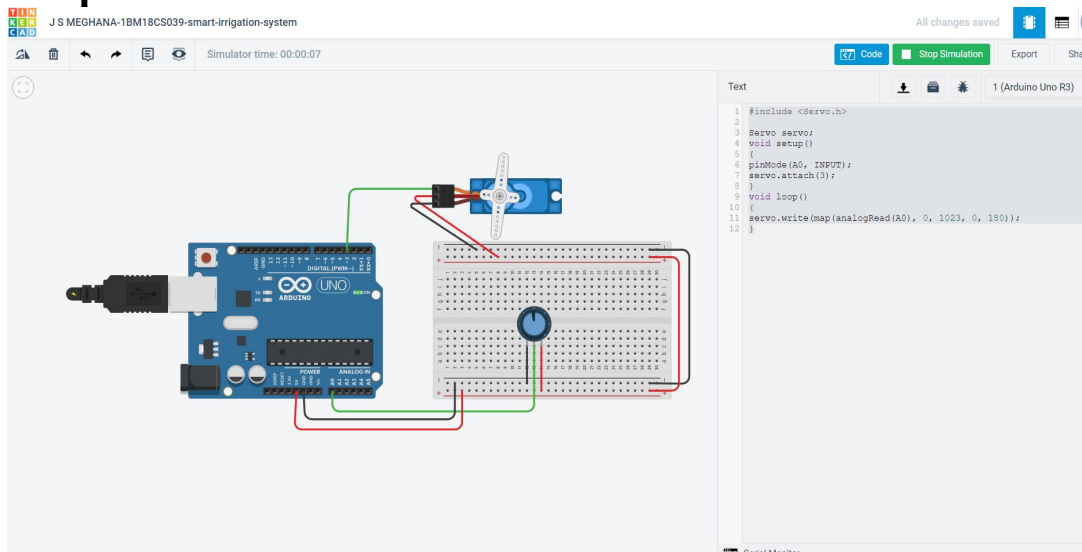
Output-1:



Output-2:



Output-3:



Output-4:

T I O K E C A T J S MEGHANA-1BM18CS039-smart-irrigation-system

Simulator time: 00:00:08

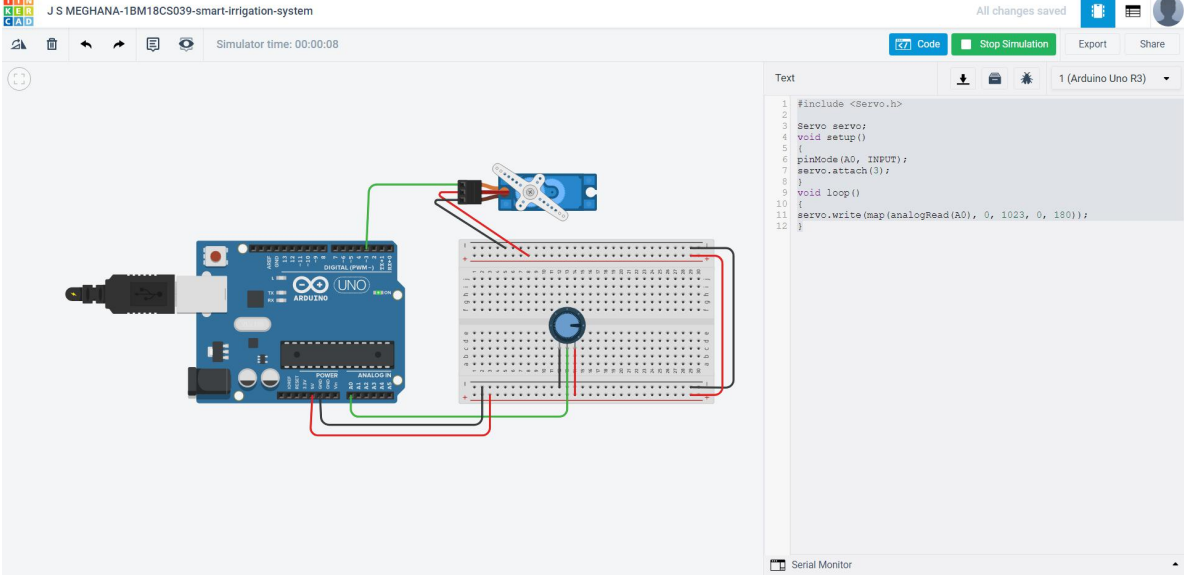
All changes saved

Code Stop Simulation Export Share

Text

```
1 #include <Servo.h>
2
3 Servo servo;
4 void setup()
5 {
6   pinMode(A0, INPUT);
7   servo.attach(3);
8 }
9 void loop()
10 {
11   servo.write(map(analogRead(A0), 0, 1023, 0, 180));
12 }
```

Serial Monitor



Output-5:

T I O K E C A T J S MEGHANA-1BM18CS039-smart-irrigation-system

Simulator time: 00:00:10

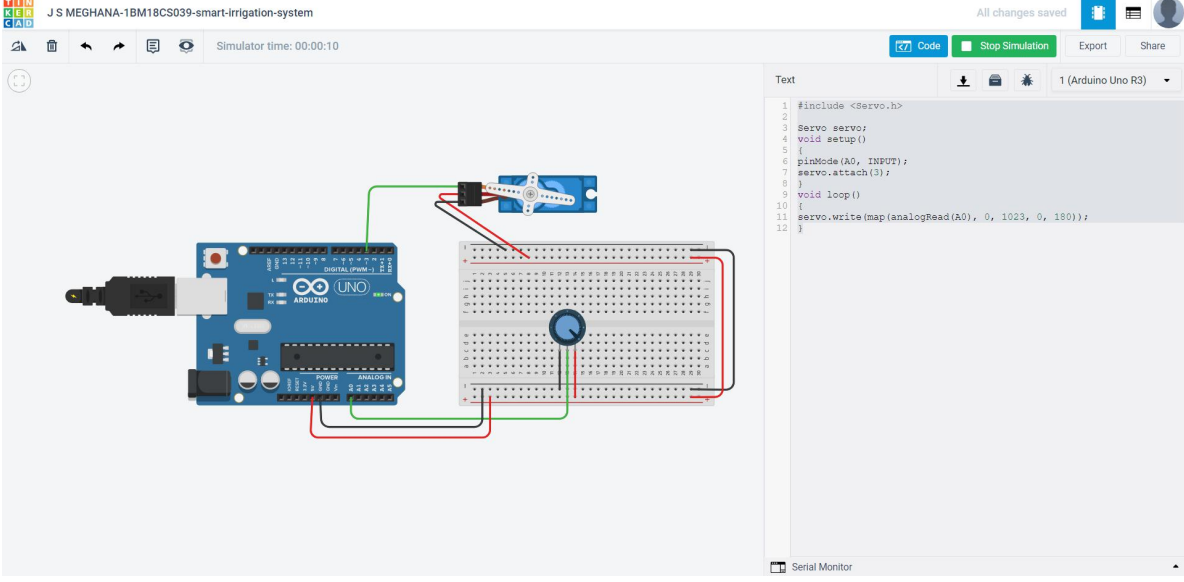
All changes saved

Code Stop Simulation Export Share

Text

```
1 #include <Servo.h>
2
3 Servo servo;
4 void setup()
5 {
6   pinMode(A0, INPUT);
7   servo.attach(3);
8 }
9 void loop()
10 {
11   servo.write(map(analogRead(A0), 0, 1023, 0, 180));
12 }
```

Serial Monitor



Output-6:

T I O K E C A T J S MEGHANA-1BM18CS039-smart-irrigation-system

Simulator time: 00:00:17.425

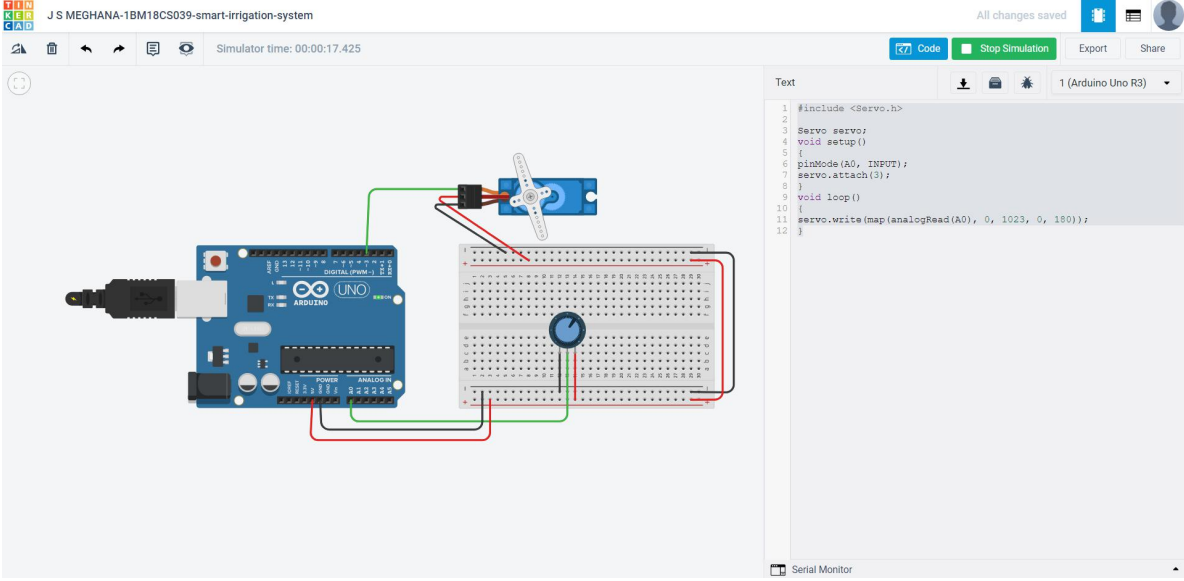
All changes saved

Code Stop Simulation Export Share

Text

```
1 #include <Servo.h>
2
3 Servo servo;
4 void setup()
5 {
6   pinMode(A0, INPUT);
7   servo.attach(3);
8 }
9 void loop()
10 {
11   servo.write(map(analogRead(A0), 0, 1023, 0, 180));
12 }
```

Serial Monitor



Output-7:

J S MEGHANA-1BM18CS039-smart-irrigation-system

Simulator time: 00:00:18

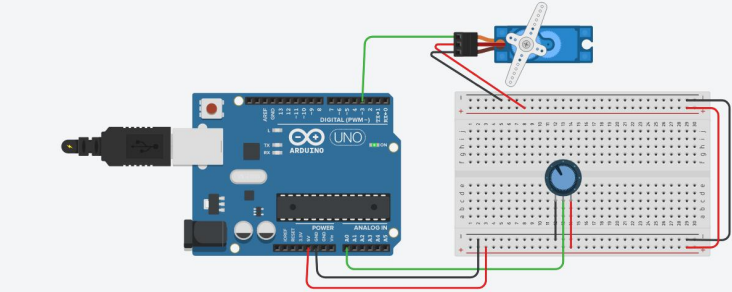
All changes saved

Code Stop Simulation Export Share

Text

```
1 #include <Servo.h>
2
3 Servo servo;
4 void setup()
5 {
6   pinMode(A0, INPUT);
7   servo.attach(3);
8 }
9 void loop()
10 {
11   servo.write(map(analogRead(A0), 0, 1023, 0, 180));
12 }
```

Serial Monitor



Output-8:

J S MEGHANA-1BM18CS039-smart-irrigation-system

Simulator time: 00:00:19

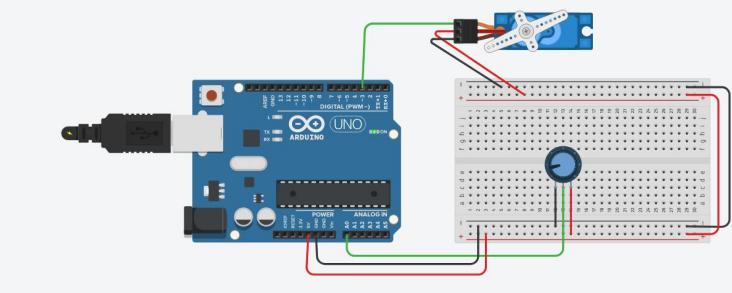
All changes saved

Code Stop Simulation Export Share

Text

```
1 #include <Servo.h>
2
3 Servo servo;
4 void setup()
5 {
6   pinMode(A0, INPUT);
7   servo.attach(3);
8 }
9 void loop()
10 {
11   servo.write(map(analogRead(A0), 0, 1023, 0, 180));
12 }
```

Serial Monitor



Output-9:

J S MEGHANA-1BM18CS039-smart-irrigation-system

Simulator time: 00:00:20

All changes saved

Code Stop Simulation Export Share

Text

```
1 #include <Servo.h>
2
3 Servo servo;
4 void setup()
5 {
6   pinMode(A0, INPUT);
7   servo.attach(3);
8 }
9 void loop()
10 {
11   servo.write(map(analogRead(A0), 0, 1023, 0, 180));
12 }
```

Serial Monitor

