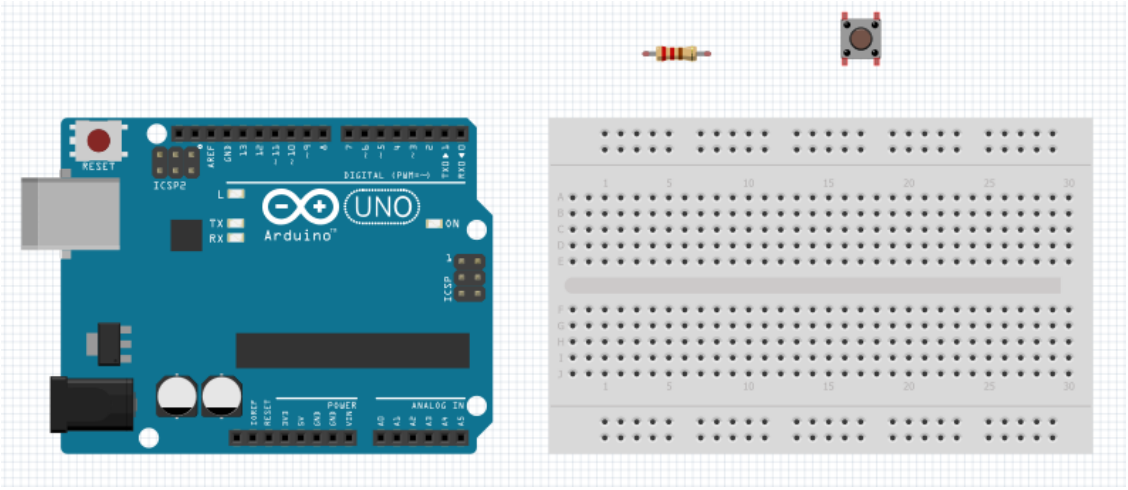
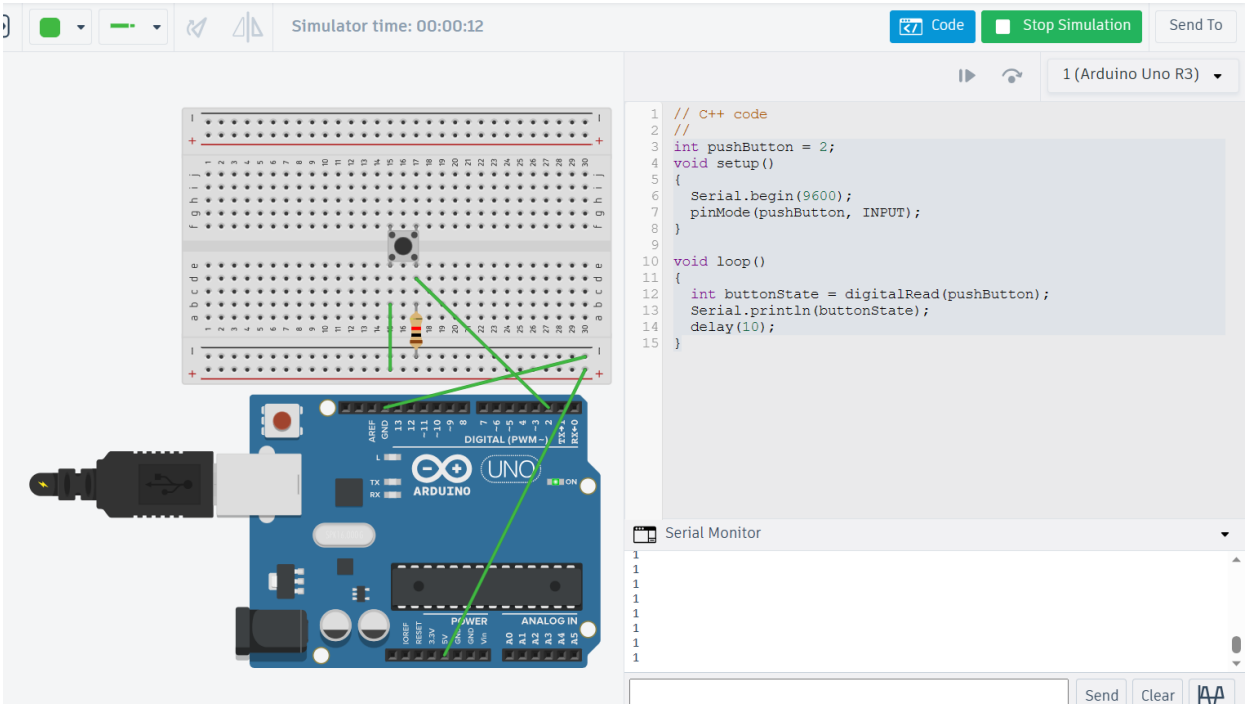
Variant № 1

Topshiriq № 1

Internet vositalari tizimi fanidan amaliy vazifa:

Quyidagi elementlardan Serial Monitor da tugmani bosilganlik holati haqida ma’lumot





Dastur kodi:

```
void setup()
{
  Serial.begin(9600);
  pinMode(2, INPUT);

void loop()
{
  int port = digitalRead(2);
  Serial.println(buttonState);
  delay(10);
}
```

Topshiriq № 2

Qo‘yliqqa, Chorsuga va Oloy bozorga boradigan avtobuslarni chiqaradigan dasturni tuzing. Foydalanuvchi Qo‘yliqni tanlasa 7, 93 deb chiqaring. Chorsu - 3, 54, 12. Oloy - 434, 5545, 11111.

HTML(index.html)

```
<!DOCTYPE html>
<head>
<meta charset="UTF-8">
<title>Avtobuslar yo'nalishi:</title>
<link rel="stylesheet" href="./style.css">
</head>
<body>
<button class="buttons" onclick="showInfo('Qo\'yliqga 7 va 93
avtobuslar boradi')">Qo'yliq</button>
<button class="buttons" onclick="showInfo('Chorsuga 3, 54 va 12
avtobuslar boradi')">Chorsu</button>
<button class="buttons" onclick="showInfo('Oloyga 434, 5545 va
11111 avtobuslar boradi')">Oloy</button>

<p id="info"></p>

<script>
    function showInfo(info) {
        document.getElementById("info").innerHTML = info;
    }
</script>
</body>
</html>
```

CSS(style.css)

```
body{
    text-align: center;
    position: relative;
}
.buttons {
    width: 170px ;
    margin: 10px;
    padding: 10px;
    border-radius: 15px 100px 15px 100px;;
}
p {
    margin:50px;
    padding: 60px;
    font-size: 30px;
    background-color:khaki;
    border-radius: 15px 100px 15px 100px; }
```

Variant № 2

Topshiriq № 1

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Topishmoqlar dasturini tuzing. Foydalanuvchiga 5 topishmoq bering. Barchasiga javob bersa - unga baxo 5 berasiz. 4 javob bersa - baxo 4.

HTML

```
<!DOCTYPE html>
<html lang="uz">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Topishmoqlar</title>
    <link rel="stylesheet" href="./style.css">
</head>

<body>
    <form class="form">
        <label>Yer tagida oltin qoziq U hammaga bo'lar oziq<input
type="text" class="input1"></label>
        <label>Qozonda emas qaynaydi Qishin yozin tinmaydi<input
type="text" class="input2"></label>
        <label>Qat qat qatlama Aqling bo'lsa tashlama<input
type="text" class="input3"></label>
        <label>Bir qushim bor Suyagi yo'q<input type="text"
class="input4"></label>
        <label>Kelar ketar izi yo'q Qaragani ko'zi yo'q<input
type="text" class="input5"></label>
        <button type="button" class="btn">Tekshirish</button>
        <p class="info"></p>
    </form>
    <script src="./script.js"></script>
</body>

</html>
```

CSS

```
.form {
    font-size: large;
```

```
    font-style: oblique;
    text-align: center;
    position: relative;
    margin: 10px;
    padding: 10px;
    background-color: khaki;
    border: 6px solid rgb(255, 207, 77);
    border-radius: 25px;
    display: flex;
    flex-direction: column;
    gap: 5px;
}

.btn {
    width: 200px;
}

input {
    margin: 7px;
}
```

JS

```
const input1 = document.querySelector(".input1"),
  input2 = document.querySelector(".input2"),
  input3 = document.querySelector(".input3"),
  input4 = document.querySelector(".input4"),
  input5 = document.querySelector(".input5"),
  button = document.querySelector(".btn"),
  info = document.querySelector(".info"),
  answer1 = "Sabzi",
  answer2 = "Buloq",
  answer3 = "Kitob",
  answer4 = "Kapalak",
  answer5 = "Shamol";
let count = 0,
  option1,
  option2,
  option3,
  option4,
  option5;
input1.addEventListener("input", (e) => {
  option1 = e.target.value;
```

```
}),
  input2.addEventListener("input", (e) => {
    option2 = e.target.value;
  }),
  input3.addEventListener("input", (e) => {
    option3 = e.target.value;
  }),
  input4.addEventListener("input", (e) => {
    option4 = e.target.value;
  }),
  input5.addEventListener("input", (e) => {
    option5 = e.target.value;
  }),
  button.addEventListener("click", () => {
    option1 === answer1 && count++,
      option2 === answer2 && count++,
      option3 === answer3 && count++,
      option4 === answer4 && count++,
      option5 === answer5 && count++,
      count >= 5
        ? (info.innerHTML = "Barcha savollarga javob berdingiz.
Bahoyingiz: 5")
        : 4 === count
        ? (info.innerHTML = "4 ta savolga javob berdingiz.
Bahoyingiz: 4")
        : 3 === count
        ? (info.innerHTML = "3 ta savolga javob berdingiz.
Bahoyingiz: 3")
        : (info.innerHTML =
            "Siz yetarlicha savollarga javob berolmadingiz.
Bahoyingiz: 2");
  });
```

Topshiriq № 2

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Ko‘paytirish (Karra) jadvalini tekshirish dasturi tuzilsin. Foydalanuvchi 2 ta son kiritsin. Bu sonlarning qiymatlari 1 dan katta, 9 dan kichikligini tekshirilsin. Ikki sondan keyin ularning ko‘paytmasi javobi ham kiritilsin. Agar javob to‘gri kiritilsa, foydalanuvchini tabriklansin, agar javob notog‘ri bo‘lsa uni ko‘paytirish jadvalini yodlashi va to‘g‘ri javob haqidagi habar bersin.

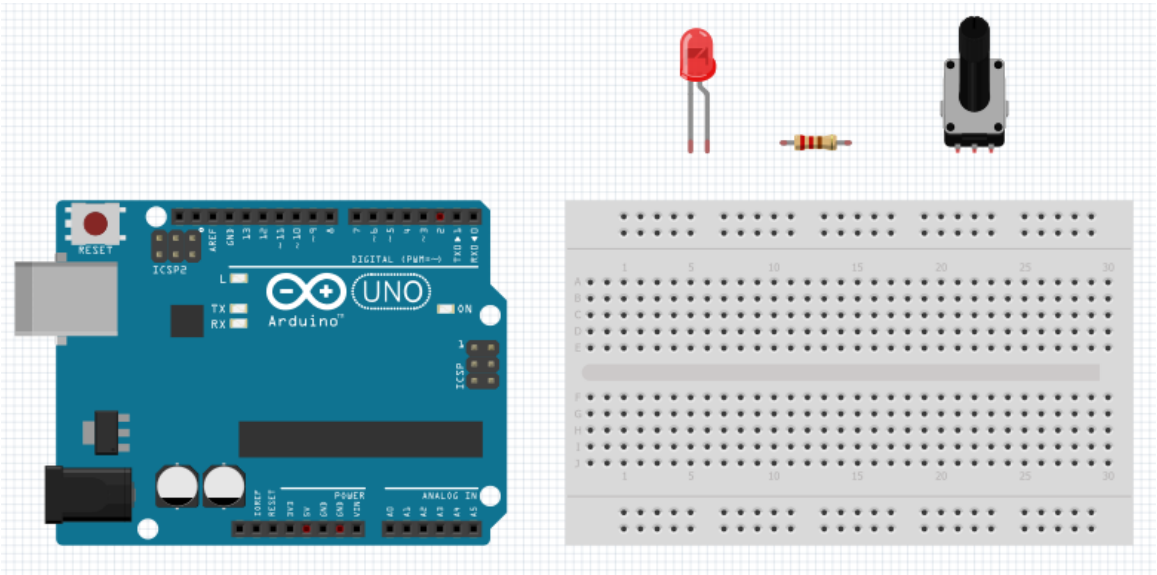
```cpp
#include <iostream>
#include <math.h>
using namespace std;
int main()
{
  int a, b, c;
  cout << "1-sonni kiriting: ";
  cin >> a;
  cout << "2-sonni kiriting: ";
  cin >> b;
  cout << a << " * " << b << " = ";
  cin >> c;
  if ((a > 1 && a < 9) && (b > 1 && b < 9))
  {
    if (c == a * b)
    {
      cout << "Tabriklaymiz javobni to'g'ri topdingiz";
    }
    else
    {
      cout << "Javob xato, ko'paytirish jadvalini yodlang,
to'g'ri javob: " << a * b;
    }
  }
  else
  {
    cout << "Kiritilgan son berilgan oraliqda emas";
  }
  return 0;
}
```

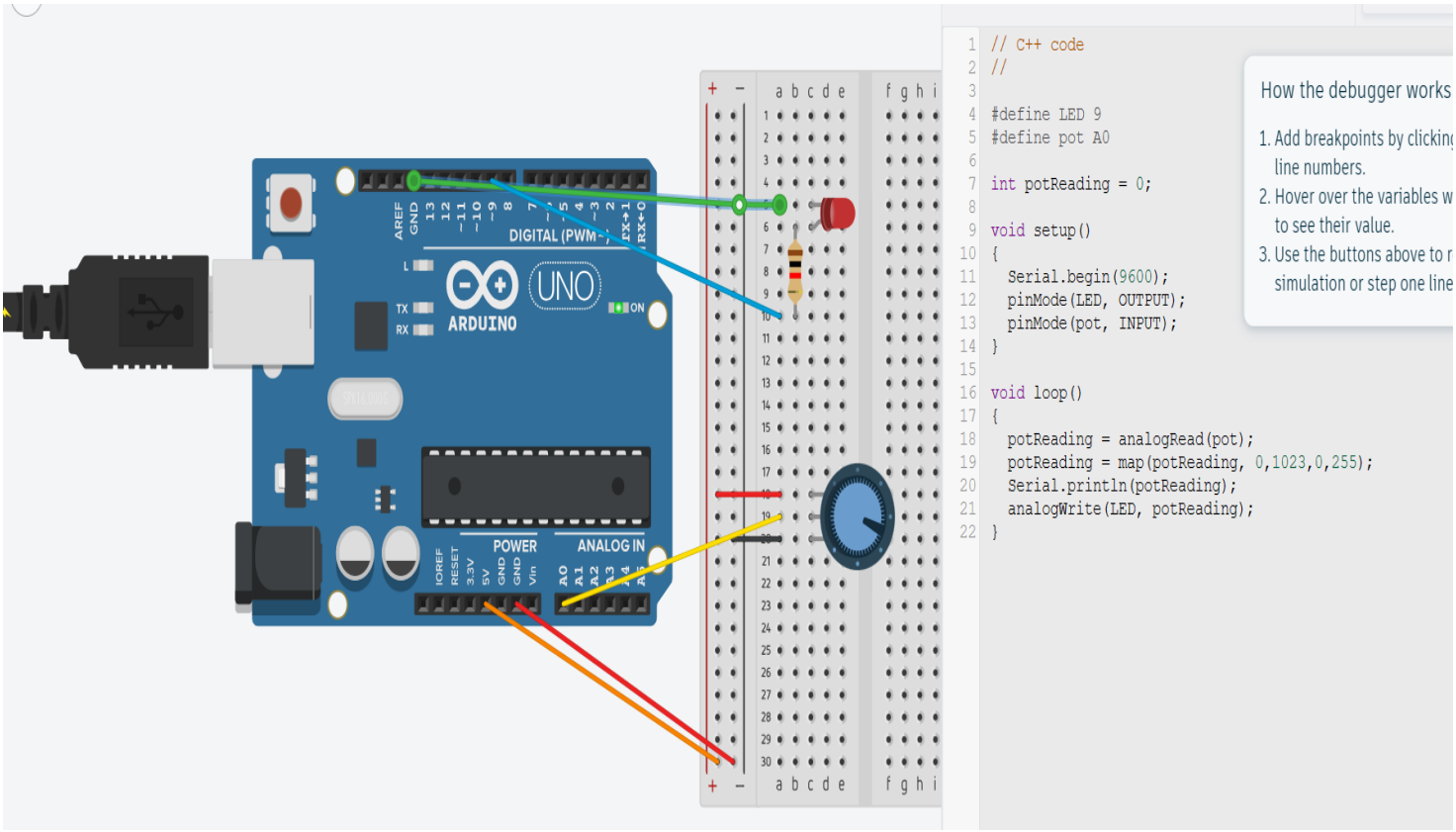
Variant № 3

Topshiriq № 1

Internet vositalari tizimi fanidan amaliy vazifa:

Quyidagi elementlardan Potensiometr ni aylantirganingizda LED yorqinligi o‘zgaradigan dasturni tuzing.





Dastur kodi:

```
#define LED 9
#define pot A0


int potReading = 0;
void setup()
{
  Serial.begin(9600);
  pinMode(LED, OUTPUT);
  pinMode(pot, INPUT);
}
void loop()
{
  potReading = analogRead(pot);
  potReading = map(potReading, 0,1023,0,255);
  Serial.println(potReading);
  analogWrite(LED, potReading);
}
```

Topshiriq № 2

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Foydalanuvchi bir, ikki yoki uch xonali son kiritsin, ushbu sonni so‘z bilan yozib chiqaradigan dastur tuzilsin.

Misol uchun: Son kiriting: 651
Kiritgan Son: Olti yuz ellik bir

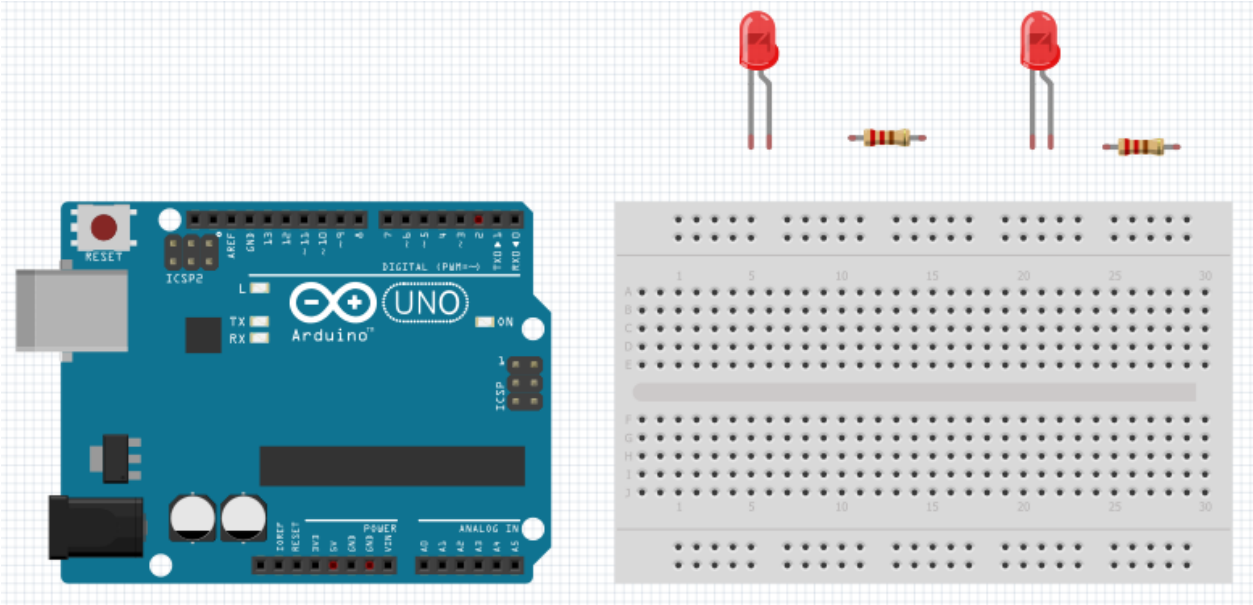
```cpp
#include<iostream>
#include<math.h>
using namespace std;

string ones[] = {"", "bir", "ikki", "uch", "to'rt", "besh",
"olti", "yetti", "sakkiz", "to'qqiz"};
string tens[] = {"", "o'n", "yigirma", "o'ttiz", "qirq", "ellik",
"oltmish", "yetmish", "sakson", "to'qson"};
string hundreds[] = {"", "yuz", "ikki yuz", "uch yuz", "to'rt
yuz", "besh yuz", "olti yuz", "yetti yuz", "sakkiz yuz", "to'qqiz
yuz"};

int main() {
    int x;
    cout << "Son kiriting: ";
    cin >> x;

    if (x > 0 && x < 1000) {
        cout << hundreds[x/100] << " " << tens[(x/10)%10] << " "
<< ones[x%10];
    } else if (x == 0) {
        cout << "nol";
    } else {
        cout << "Bu son berilgan oraliqda emas";
    }

    return 0;
}
```

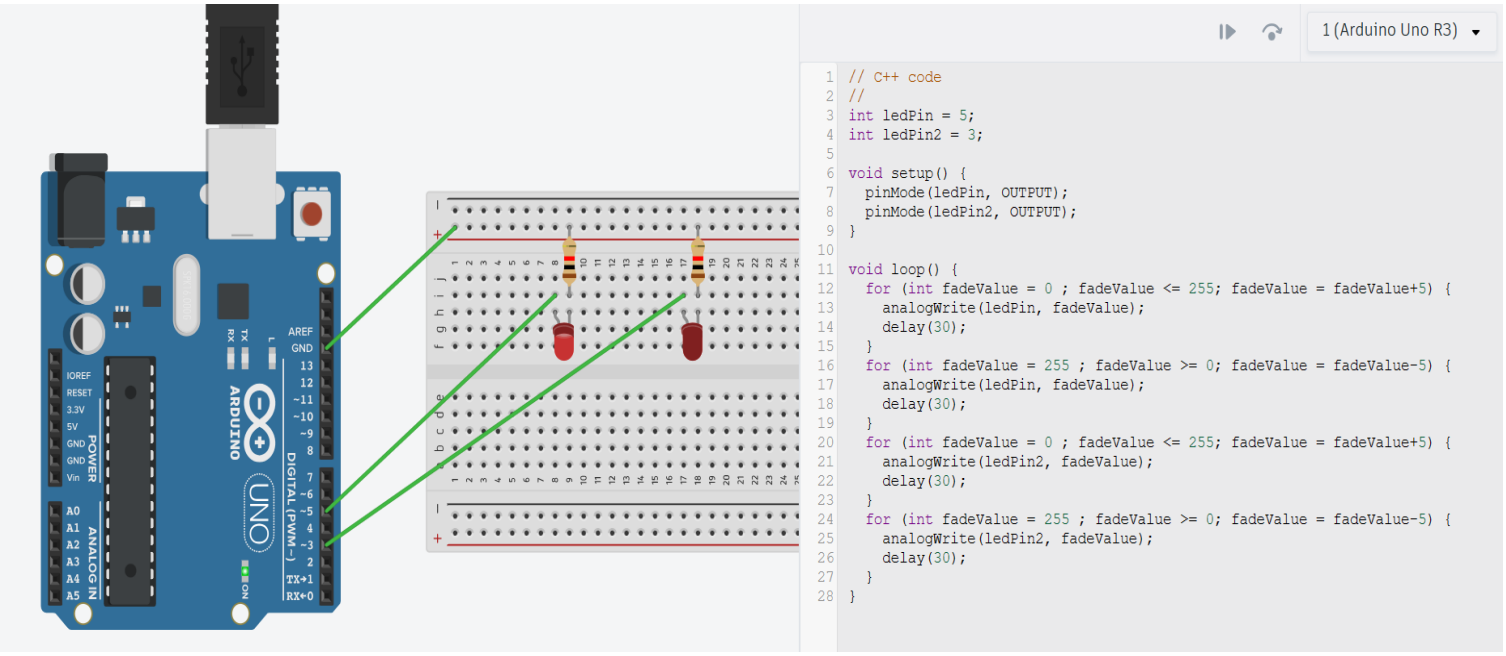
Variant № 4

Topshiriq № 1

Internet vositalari tizimi fanidan amaliy vazifa:

Quyidagi elementlardan AnalogWrite funksiyasidan foydalangan holda 1 - LEDni asta o‘chiring/yoqing. Loop funksiyai bir marotaba bajarilganda 2 – LED bir soniya davomida yonsin





```
// C++ code
//
int ledPin = 5;
int ledPin2 = 3;

void setup() {
  pinMode(ledPin, OUTPUT);
  pinMode(ledPin2, OUTPUT);
}

void loop() {
  for (int fadeValue = 0 ; fadeValue <= 255; fadeValue = fadeValue+5) {
    analogWrite(ledPin, fadeValue);
    delay(30);
  }
  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-5) {
    analogWrite(ledPin, fadeValue);
    delay(30);
  }
  for (int fadeValue = 0 ; fadeValue <= 255; fadeValue = fadeValue+5) {
    analogWrite(ledPin2, fadeValue);
    delay(30);
  }
  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-5) {
    analogWrite(ledPin2, fadeValue);
    delay(30);
  }
}
```

Dastur kodi:

```
int ledPin = 5;
int ledPin2 = 3;
void setup() {
  pinMode(ledPin, OUTPUT);
  pinMode(ledPin2, OUTPUT);
}
void loop() {
  for (int fadeValue = 0 ; fadeValue <= 255; fadeValue = fadeValue+5) {
    analogWrite(ledPin, fadeValue);
    delay(30);
  }
  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-5) {
    analogWrite(ledPin, fadeValue);
    delay(30);
  }
  for (int fadeValue = 0 ; fadeValue <= 255; fadeValue = fadeValue+5) {
    analogWrite(ledPin2, fadeValue);
    delay(30);
  }
  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-5) {
    analogWrite(ledPin2, fadeValue);
    delay(30);
  }
}
```

Topshiriq № 2

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Foydalanuvchiga bir, ikki yoki uch xonali raqamni kiritib, ushbu raqamni so‘z bilan chop etadigan dastur yaratishga ruxsat bering.

Masalan: 651 raqamini kiriting.

HTML

```html
<!DOCTYPE html>
<html>
<head>
  <title>Sonlarni harflarga konvertator</title>
  <link rel="stylesheet" href="./style.css">
  <script src="./script.js"></script>
</head>
<body>
  <h1>Sonlarni harflarga konvertator</h1>
  <p>Raqam kiriting (1 dan 999 gacha):</p>
  <input type="number" id="number" min="1" max="999">
  <button onclick="convertToLetters()">KONVERT</button>
  <p id="result"></p>
</body>
</html>
```

CSS

```css
body{
    font-family: Segoe UI;
    text-align: center;
    display: flex;
    flex-direction: column;
    position: relative;
    padding:10px;
    gap: 5px;
}
```

JS

```js
function convertToLetters() {
  var units = [
    "",
    "bir",
    "ikki",
    "uch",
```

```
    "to'rt",
    "besh",
    "olti",
    "yetti",
    "sakkiz",
    "to'qqiz",
  ];
  var teens = [
    "o'n",
    "o'n bir",
    "o'n ikki",
    "o'n uch",
    "o'n to'rt",
    "o'n besh",
    "o'n olti",
    "o'n yetti",
    "o'n sakkiz",
    "o'n to'qqiz",
  ];
  var tens = [
    "",
    "",
    "yigirma",
    "o'ttiz",
    "qirq",
    "ellik",
    "oltmish",
    "yetmish",
    "sakson",
    "to'qson",
  ];
  var hundreds = [
    "",
    "yuz",
    "ikki yuz",
    "uch yuz",
    "to'rt yuz",
    "besh yuz",
    "olti yuz",
    "yetti yuz",
    "sakkiz yuz",
    "to'qqiz yuz",
```

```
  ];

  var number = parseInt(document.getElementById("number").value);
  var result = "";

  if (isNaN(number)) {
    result = "Raqam kiriting :";
  } else if (number === 0) {
    result = "nol";
  } else if (number < 0 || number > 999) {
    result = "Shu oraliqda: 1 dan 999";
  } else {
    if (number >= 100) {
      result += hundreds[Math.floor(number / 100)] + " ";
      number %= 100;
    }

    if (number >= 20) {
      result += tens[Math.floor(number / 10)] + " ";
      number %= 10;
    } else if (number >= 10) {
      result += teens[number - 10] + " ";
      number = 0;
    }

    if (number > 0) {
      result += units[number] + " ";
    }
  }

  document.getElementById("result").textContent = result.trim();
}
```

Variant 5

Topshiriq № 1

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Matematik hisob kitoblarni dasturlash: To‘gri burchakli uchburchak yuzi hamda perimetrni hisoblash

HTML

```
<!DOCTYPE html>
<html lang="uz">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Uchburchak yuzi va perimetrini hisoblash</title>
    <link rel="stylesheet" href="./style.css" </head>

<body>
    <form class="form">
        <label>
            a-tomonni kiriting
            <input type="number" class="input">
        </label>
        <label>
            b-tomonni kiriting
            <input type="number" class="input">
        </label>
        <label>
            c-tomonni kiriting
            <input type="number" class="input">
        </label>
        <button type="button" class="btn">Hisoblash</button>
        <p class="info"></p>
    </form>
    <script src="./script.js"></script>
</body>
</html>
```

JS

```
const inputs = document.querySelectorAll(".input");
const button = document.querySelector(".btn");
const info = document.querySelector(".info");

button.addEventListener("click", () => {
  const [a, b, c] = [...inputs].map((input) => +input.value);

  const area = (a * b) / 2;
```

```
  const perimeter = a + b + c;

  info.innerHTML = `Uchburchak yuzi: ${area}<br>Uchburchak
perimetri: ${perimeter}`;
});
```

CSS

```
form{
    font-family:Tahoma;
    font-size: larger;
    text-align: center;
    display: flex;
    flex-direction: column;
    padding:10px;
    position: relative;
    gap: 5px;
}
```

Topshiriq № 2

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Foydalanuvchi to‘xtovsiz sonlar kiritsin. 0 sonini kiritganidan keyin dastur o‘z ishini to‘xtatsin va nechta son kiritganini, ularning umumiy yig‘indisini, sonlarning eng katta qiymatini, eng kichigini va o‘rtacha qiymatini hisoblaydigan dastur tuzilsin.

```
#include <iostream>
using namespace std;
int main()
{
    int a, c, sum = 0, large = 0, small = 0, average;
    cout << "Sonlarni kriting: " << endl;
    for (;;)
    {
        cin >> a;
        c++;
        sum += a;
        if (a > large)
        {
            large = a;
        }
        if (a < small)
        {
```

```
            small = a;
        }
        average = sum / c;
        if (a == 0)
        {
            cout << "\n Nechta son kiritilgani: " << c;
            cout << "\n Sonlarning umumiy yig'indisi: " << sum;
            cout << "\n Sonlarning eng katta qiymati: " << large;
            cout << "\n Sonlarning eng kichik qiymati: " <<
small;
            cout << "\n Sonlarning o'rtacha qiymati: " <<
average;
            break;
        }
        else
            continue;
    }
    return 0;
}
```

Variant № 6

Topshiriq № 1

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Maxsulot narxini kiriting. Kiritilgan summani mavjud kupyuralarda (100, 200, 500, 1000, 5000, 10000, 50000 so‘mlik) soni jihatidan eng kam amalga oshirib to‘lash dasturi tuzilsin.

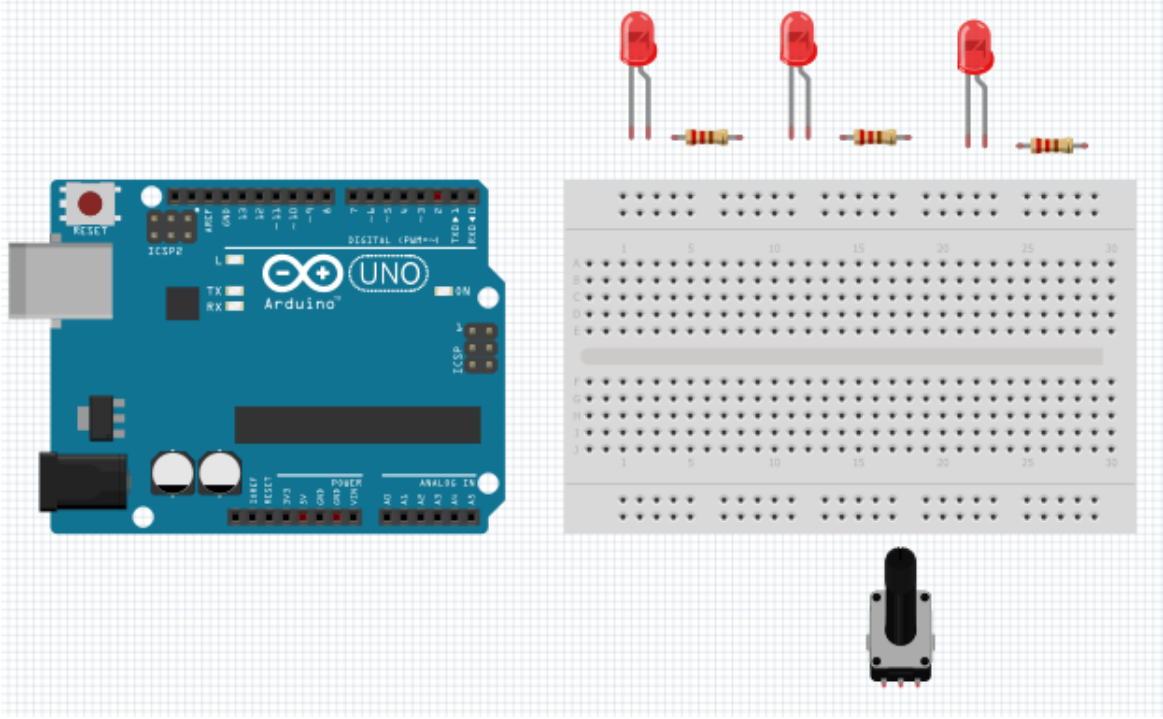
```
#include <iostream>
using namespace std;
int main()
{
    cout << " Mavjud kupyuralar: 50000, 10000, 5000, 1000, 500,
200, 100" << endl;
    int pul[] = {50000, 10000, 5000, 1000, 500, 200, 100};
    int miqdorPul[7] = {0};
    int narx;
    cout << "Maxsulot narxini kiriting: ";
    cin >> narx;
    int qolganMiqdor = narx;
    for (int i = 0; i < 7; i++)
    {
        miqdorPul[i] = qolganMiqdor / pul[i];
```

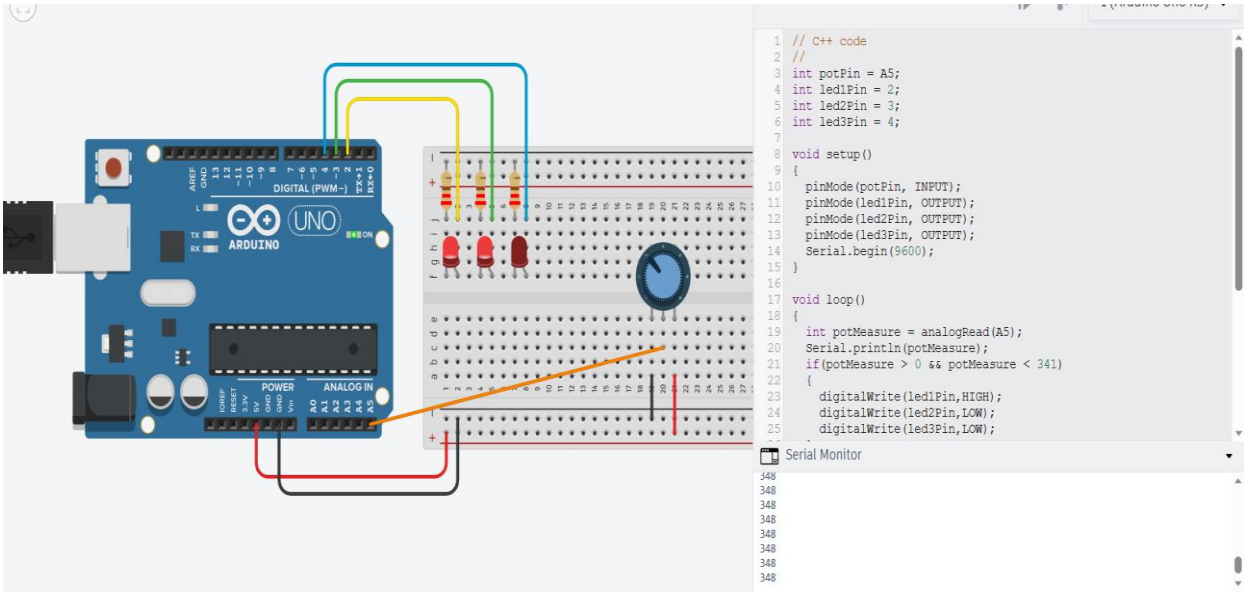
```
        qolganMiqdor = qolganMiqdor % pul[i];
    }
    cout << "Eng kam to'lov uchun berilgan kupyuralar bo'yicha "
<< narx << " so'm puldan:\n";
    for (int i = 0; i < 7; i++)
    {
        if (miqdorPul[i] > 0)
        {
            cout << pul[i] << " so'mlik kupyuralardan: " <<
miqdorPul[i] << " tasini ishlatish mumkin" << endl;
        }
    }
    return 0;
}
```

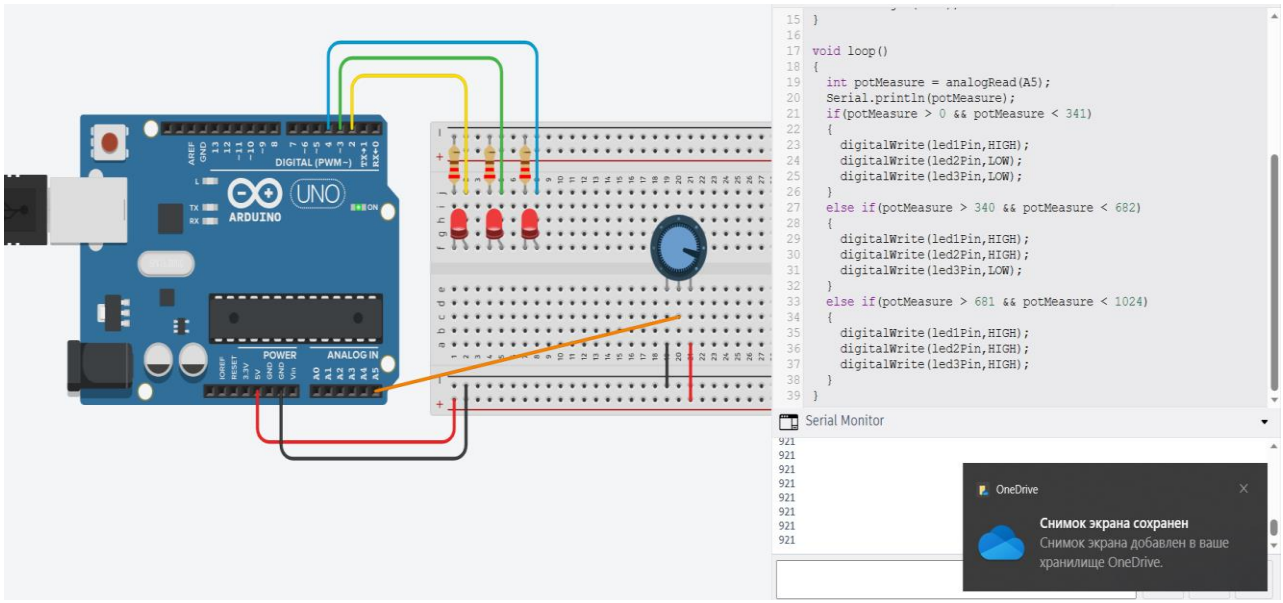
Topshiriq № 2

Internet vositalari tizimi fanidan amaliy vazifa:

Quyidagi elementlardan Potensiometr ni aylantirganingizda LED lar ketma ket yonadigan dasturni tuzing.







Dastur kodi:

```
int potPin = A5;
int led1Pin = 2;
int led2Pin = 3;
int led3Pin = 4;


void setup()
{
  pinMode(potPin, INPUT);
  pinMode(led1Pin, OUTPUT);
```

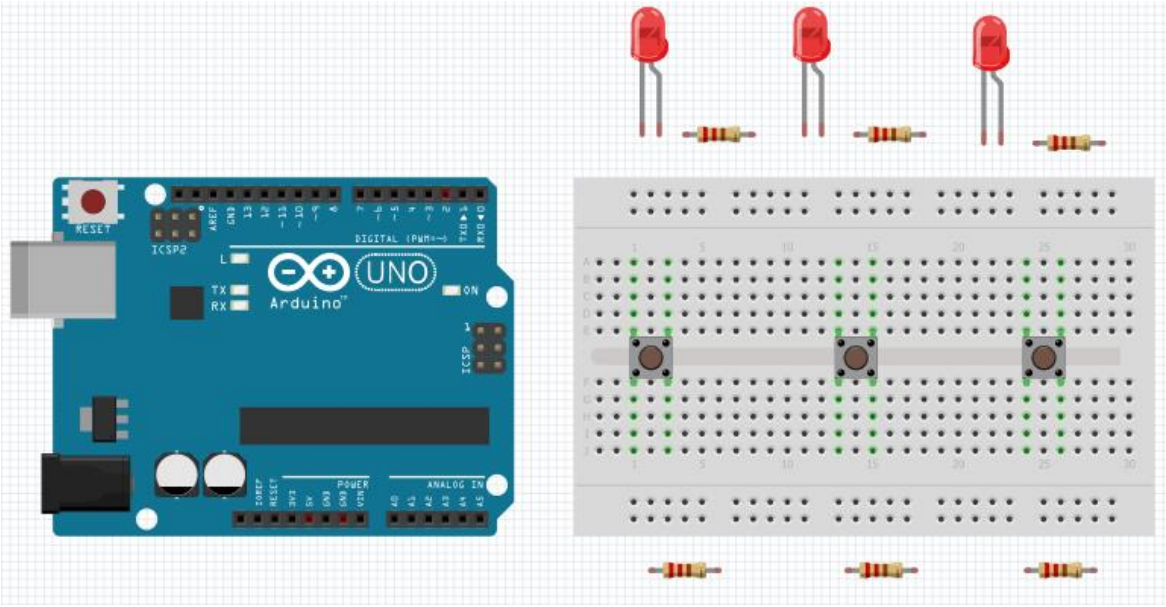
```
  pinMode(led2Pin, OUTPUT);
  pinMode(led3Pin, OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  int potMeasure = analogRead(A5);
  Serial.println(potMeasure);
  if(potMeasure > 0 && potMeasure < 341)
  {
    digitalWrite(led1Pin,HIGH);
    digitalWrite(led2Pin,LOW);
    digitalWrite(led3Pin,LOW);
  }
  else if(potMeasure > 340 && potMeasure < 682)
  {
    digitalWrite(led1Pin,HIGH);
    digitalWrite(led2Pin,HIGH);
    digitalWrite(led3Pin,LOW);
  }
  else if(potMeasure > 681 && potMeasure < 1024)
  {
    digitalWrite(led1Pin,HIGH);
    digitalWrite(led2Pin,HIGH);
    digitalWrite(led3Pin,HIGH);
  }
}
```

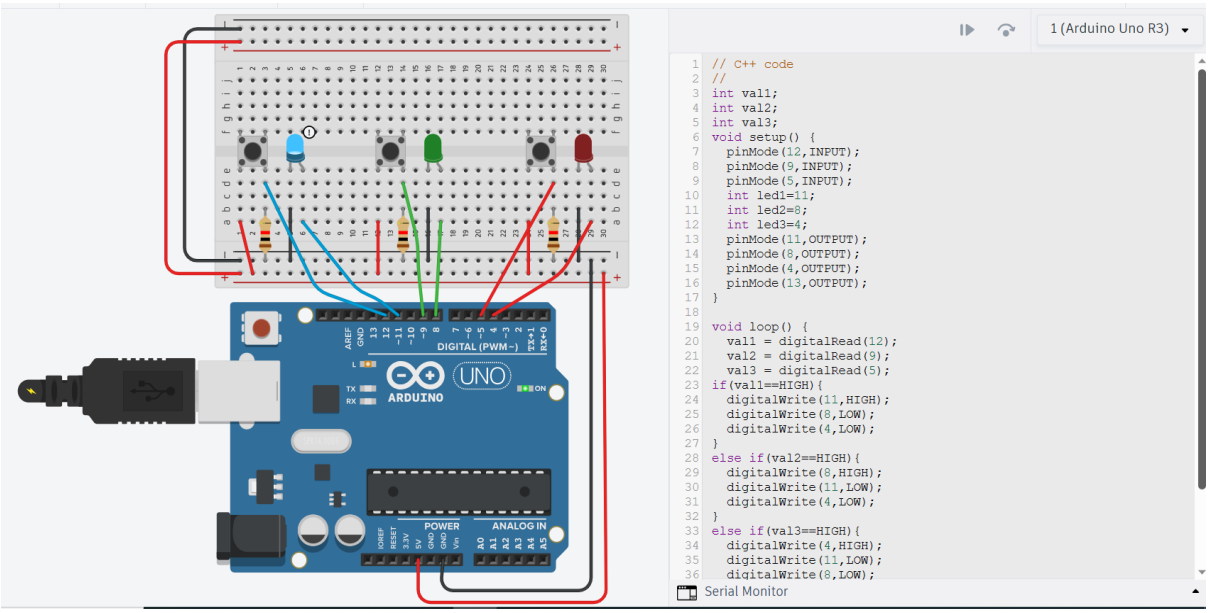
Variant № 7

Topshiriq № 1

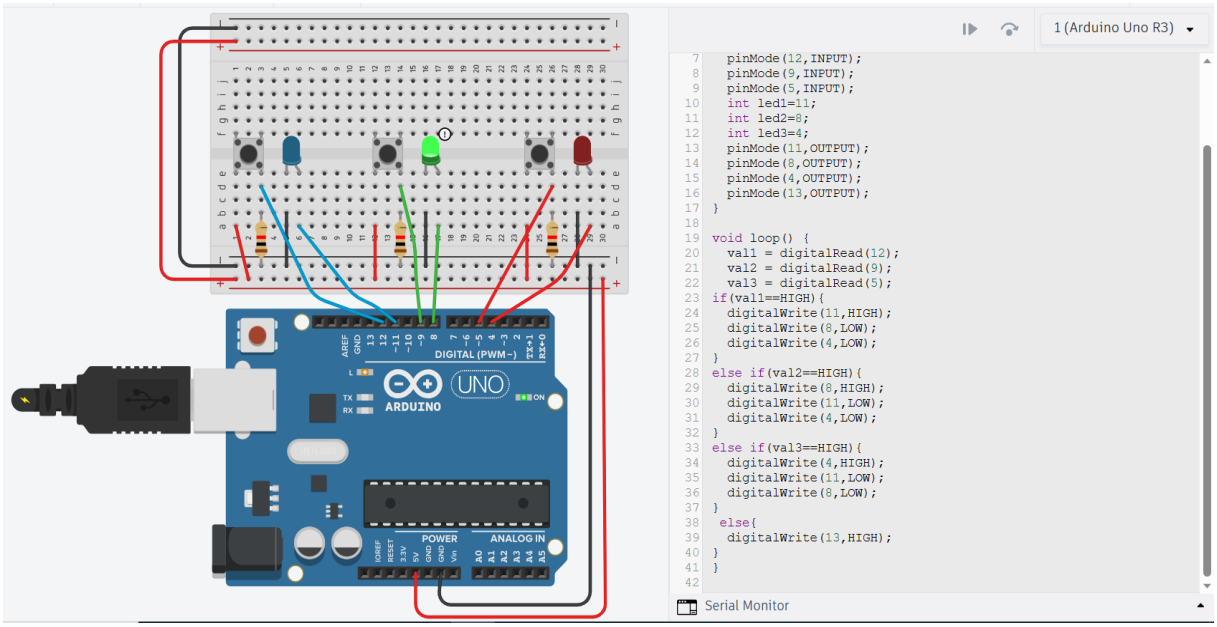
Internet vositalari tizimi fanidan amaliy vazifa:

Quyidagi elementlardan 1 - Tugmani bosganingizda 1 -LED yonadigan, 2 – tugmani bosganda 2 - LED yonadigan, 3 – tugmani bosganda 3 - LED yonadigan dasturni tuzing.





```
// C++ code
//
int val1;
int val2;
int val3;
void setup() {
  pinMode(12,INPUT);
  pinMode(9,INPUT);
  pinMode(5,INPUT);
  int led1=11;
  int led2=8;
  int led3=4;
  pinMode(11,OUTPUT);
  pinMode(8,OUTPUT);
  pinMode(4,OUTPUT);
  pinMode(13,OUTPUT);
}

void loop() {
  val1 = digitalRead(12);
  val2 = digitalRead(9);
  val3 = digitalRead(5);
if(val1==HIGH){
  digitalWrite(11,HIGH);
  digitalWrite(8,LOW);
  digitalWrite(4,LOW);
}
else if(val2==HIGH){
  digitalWrite(8,HIGH);
  digitalWrite(11,LOW);
  digitalWrite(4,LOW);
}
else if(val3==HIGH){
  digitalWrite(4,HIGH);
  digitalWrite(11,LOW);
  digitalWrite(8,LOW);
```



Dastur kodi:

```
int val1;
int val2;
int val3;
void setup() {
  pinMode(12,INPUT);
  pinMode(9,INPUT);
  pinMode(5,INPUT);
  int led1=11;
  int led2=8;
  int led3=4;
  pinMode(11,OUTPUT);
  pinMode(8,OUTPUT);
  pinMode(4,OUTPUT);
  pinMode(13,OUTPUT);
}

void loop() {
  val1 = digitalRead(12);
```

```
  val2 = digitalRead(9);
  val3 = digitalRead(5);
if(val1==HIGH){
  digitalWrite(11,HIGH);
  digitalWrite(8,LOW);
  digitalWrite(4,LOW);
}
else if(val2==HIGH){
  digitalWrite(8,HIGH);
  digitalWrite(11,LOW);
  digitalWrite(4,LOW);
}
else if(val3==HIGH){
  digitalWrite(4,HIGH);
  digitalWrite(11,LOW);
  digitalWrite(8,LOW);
}
 else{
  digitalWrite(13,HIGH);
}
}
```

Topshiriq № 2

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Ko‘paytirish (Karra) jadvalini tekshirish dasturi tuzilsin. Foydalanuvchi 2 ta son kiritsin. Bu sonlarning qiymatlari 1 dan katta, 9 dan kichikligini tekshirilsin. Ikki sondan keyin ularning ko‘paytmasi javobi ham kiritilsin. Agar javob to‘gri kiritilsa, foydalanuvchini tabriklansin, agar javob notog‘ri bo‘lsa uni ko‘paytirish jadvalini yodlashi va to‘g‘ri javob haqidagi habar bersin.

```
#include <iostream>
#include <math.h>
using namespace std;
int main()
```

```
{
  int a, b, c;
  cout << "1-sonni kiriting: ";
  cin >> a;
  cout << "2-sonni kiriting: ";
  cin >> b;
  cout << a << " * " << b << " = ";
  cin >> c;
  if ((a > 1 && a < 9) && (b > 1 && b < 9))
  {
    if (c == a * b)
    {
      cout << "Tabriklaymiz javobni to'g'ri topdingiz";
    }
    else
    {
      cout << "Javob xato, ko'paytirish jadvalini yodlang,
to'g'ri javob: " << a * b;
    }
  }
  else
  {
    cout << "Kiritilgan son berilgan oraliqda emas";
  }
  return 0;
}
```

Variant № 8

Topshiriq № 1

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Foydalanuvchi bir, ikki yoki uch xonali son kiritsin, ushbu sonni so‘z bilan yozib chiqaradigan dastur tuzilsin.

Misol uchun: Son kiriting: 651
Kiritgan Son: Olti yuz ellik bir

```cpp
#include <iostream>
#include <math.h>
using namespace std;

string ones[] = {"", "bir", "ikki", "uch", "to'rt", "besh",
"olti", "yetti", "sakkiz", "to'qqiz"};
string tens[] = {"", "o'n", "yigirma", "o'ttiz", "qirq", "ellik",
"oltmish", "yetmish", "sakson", "to'qson"};
string hundreds[] = {"", "yuz", "ikki yuz", "uch yuz", "to'rt
yuz", "besh yuz", "olti yuz", "yetti yuz", "sakkiz yuz", "to'qqiz
yuz"};

int main()
{
    int x;
    cout << "Son kiriting: ";
    cin >> x;

    if (x > 0 && x < 1000)
    {
        cout << hundreds[x / 100] << " " << tens[(x / 10) % 10]
<< " " << ones[x % 10];
    }
    else if (x == 0)
    {
        cout << "nol";
    }
    else
    {
        cout << "Bu son berilgan oraliqda emas";
    }

    return 0;
}
```

Topshiriq № 2

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Foydalanuvchi unda bor pulini kiritsin. Va molni tanlasin. Puli yetsa - “sotib oldingiz” deb chiqaring. Puli yetmasa - “uzr, pul yetmadi” deb yozing.

HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
    <link rel="stylesheet" href="./style.css">
</head>
<body>
    <form>
        <label>
            <input type="number" class="input">
        </label>
        <select class="techniques">
            <option></option>
            <option value="1000">Telefon</option>
            <option value="7000">Kompyuter</option>
            <option value="5000">Noutbuk</option>
            <option value="3000">Televizor</option>
        </select>
        <button type="button" class="btn">Sotib olish</button>
        <p class="info"></p>
    </form>
    <script src="./script.js"></script>
</body>
</html>
```

JS

```
const input = document.querySelector(".input");
const techniques = document.querySelector(".techniques");
const button = document.querySelector(".btn");
const info = document.querySelector(".info");
```

```
let amount;
let selectedItem;

input.addEventListener("input", (e) => {
  amount = +e.target.value;
});
techniques.addEventListener("click", (e) => {
  selectedItem = +e.target.value;
});
button.addEventListener("click", () => {
  console.log(amount);
  console.log(selectedItem);
  if (amount >= selectedItem) {
    info.innerHTML = "Sotib oldingiz";
  } else {
    info.innerHTML = "Uzr, pul yetmadi";
  }
});
```

Variant 9

Topshiriq № 1

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Topishmoqlar dasturini tuzing. Foydalanuvchiga 5 topishmoq bering. Barchasiga javob bersa - unga baxo 5 berasiz. 4 javob bersa - baxo 4.

HTML

```
<!DOCTYPE html>
<html lang="uz">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-
scale=1.0">
<title>Topishmoqlar</title>
<link rel="stylesheet" href="./style.css">
</head>
<body>
<form class="form">
    <label>Yer tagida oltin qoziq U hammaga bo'lar oziq<input
type="text" class="input1"></label>
```

```
    <label>Qozonda emas qaynaydi Qishin yozin tinmaydi<input
type="text" class="input2"></label>
    <label>Qat qat qatlama Aqling bo'lsa tashlama<input
type="text" class="input3"></label>
    <label>Bir qushim bor Suyagi yo'q<input type="text"
class="input4"></label>
    <label>Kelar ketar izi yo'q Qaragani ko'zi yo'q<input
type="text" class="input5"></label>
    <button type="button" class="btn">Tekshirish</button>
    <p class="info"></p>
</form>
<script src="./script.js"></script>
</body>
</html>
```

JavaScript

```
const input1=document.querySelector(".input1"),
              input2=document.querySelector(".input2"),
              input3=document.querySelector(".input3"),
              input4=document.querySelector(".input4"),
              input5=document.querySelector(".input5"),
              button=document.querySelector(".btn"),
              info=document.querySelector(".info"),
              answer1="Sabzi",
              answer2="Buloq",
              answer3="Kitob",
              answer4="Kapalak",
              answer5="Shamol";
              let
count=0,option1,option2,option3,option4,option5;
              input1.addEventListener("input",(e=>{option1=e.targ
et.value})),
              input2.addEventListener("input",(e=>{option2=e.targ
et.value})),
              input3.addEventListener("input",(e=>{option3=e.targ
et.value})),
              input4.addEventListener("input",(e=>{option4=e.targ
et.value})),
              input5.addEventListener("input",(e=>{option5=e.targ
et.value})),
              button.addEventListener("click",(()=>{option1===ans
wer1&&count++,option2===answer2&&count++,option3===answer3&&count
```

```
++,option4===answer4&&count++,option5===answer5&&count++,count>=5
?info.innerHTML="Barcha savollarga javob berdingiz. Bahoyingiz:
5":4===count?info.innerHTML="4 ta savolga javob berdingiz.
Bahoyingiz: 4":3===count?info.innerHTML="3 ta savolga javob
berdingiz. Bahoyingiz: 3":info.innerHTML="Siz yetarlicha
savollarga javob berolmadingiz. Bahoyingiz: 2"}))
```

CSS

```
.form {
    font-size: large;
    font-style:oblique;
    text-align: center;
    position: relative;
    margin: 10px;
    padding: 10px;
    background-color: khaki;
    border: 6px solid rgb(255, 207, 77);
    border-radius: 25px;
    display: flex;
    flex-direction: column;
    gap: 5px;
    }
    .btn {
    width: 200px;
    }
input{
    margin: 7px;
}
```

Topshiriq № 2

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Maxsulot narxini kiriting. Kiritilgan summani mavjud kupyuralarda (100, 200, 500, 1000, 5000, 10000, 50000 so‘mlik) soni jihatidan eng kam amalga oshirib to‘lash dasturi tuzilsin.

```
#include <iostream>
using namespace std;
int main()
{
    cout << " Mavjud kupyuralar: 50000, 10000, 5000, 1000, 500,
200, 100" << endl;
    int pul[] = {50000, 10000, 5000, 1000, 500, 200, 100};
    int miqdorPul[7] = {0};
    int narx;
```

```
    cout << "Maxsulot narxini kiriting: ";
    cin >> narx;
    int qolganMiqdor = narx;
    for (int i = 0; i < 7; i++)
    {
        miqdorPul[i] = qolganMiqdor/ pul[i];
        qolganMiqdor = qolganMiqdor % pul[i];
    }
    cout << "Eng kam to'lov uchun berilgan kupyuralar bo'yicha "
<< narx << " so'm puldan:\n";
    for (int i = 0; i < 7; i++)
    {
        if (miqdorPul[i] > 0)
        {
            cout << pul[i] << " so'mlik kupyuralardan: " <<
miqdorPul[i] << " tasini ishlatish mumkin" << endl;
        }
    }
    return 0;
}
```

Variant № 10

Topshiriq № 1

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Qo‘yliqqa, Chorsuga va Oloy bozorga boradigan avtobuslarni chiqaradigan dasturni tuzing. Foydalanuvchi Qo‘yliqni tanlasa 7, 93 deb chiqaring. Chorsu - 3, 54, 12. Oloy - 434, 5545, 11111.

HTML

```
<!DOCTYPE html>

<head>
    <meta charset="UTF-8">
    <title>Avtobuslar yo'nalishi:</title>
    <link rel="stylesheet" href="./style.css">
</head>

<body>
    <button class="buttons" onclick="showInfo('Qo\'yliqga 7 va 93
avtobuslar boradi')">Qo'yliq</button>
    <button class="buttons" onclick="showInfo('Chorsuga 3, 54 va
12 avtobuslar boradi')">Chorsu</button>
```

```
    <button class="buttons" onclick="showInfo('Oloyga 434, 5545
va 11111 avtobuslar boradi')">Oloy</button>

    <p id="info"></p>

    <script>
        function showInfo(info) {
            document.getElementById("info").innerHTML = info;
        }
    </script>
</body>
</html>
```

CSS

```
body{
    text-align: center;
    position: relative;
}
.buttons {
    width: 170px ;
    margin: 10px;
    padding: 10px;
    border-radius: 15px 100px 15px 100px;;
}
p {
    margin:50px;
    padding: 60px;
    font-size: 30px;
    background-color:khaki;
    border-radius: 15px 100px 15px 100px;
}
```

Topshiriq № 2

OYD va tarmoq dasturlash (C++, Java) fanidan fanidan amaliy vazifa:

Foydalanuvchi ikkita son kiritsin. Ushbu sonlarni birinchisidan ikkinchisi oralag‘idagi juft sonlarni va ularni yig‘indisini hisoblaydigan dastur tuzilsin.

```
#include <iostream>
using namespace std;
int main()
{
  int birSon, ikkiSon, juftQiymat = 0;
```

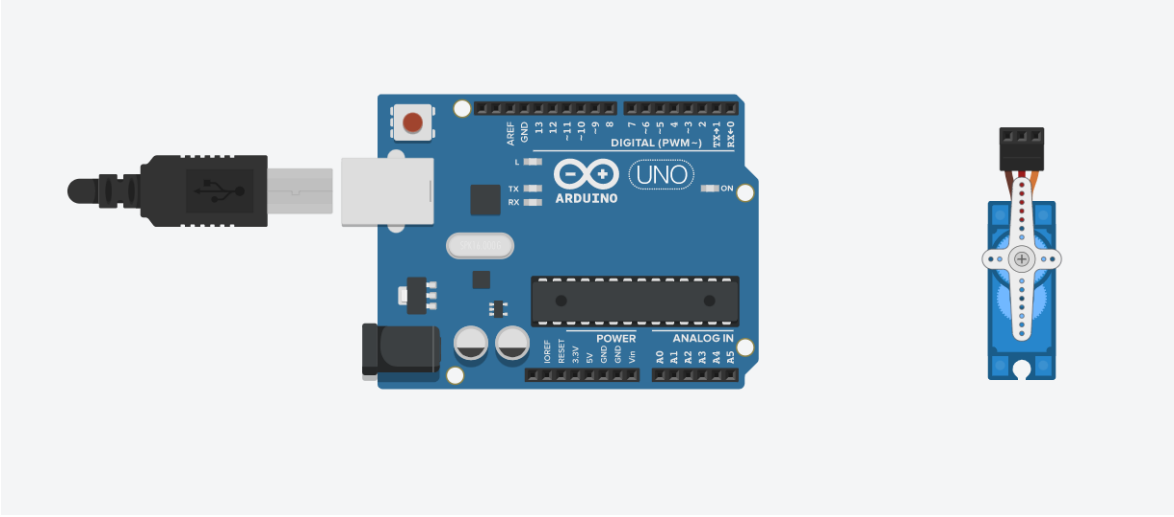
```
  cout << "Boshlang'ich sonni kiriting: ";
  cin >> birSon;
  cout << "Ohirgi sonni kiriting: ";
  cin >> ikkiSon;

  if (birSon > ikkiSon)
    swap(birSon, ikkiSon);

  for (int son = birSon; son <= ikkiSon; son++)
    if (son % 2 == 0)
      juftQiymat += son;

  cout << "Juft sonlar yeg'indisi: " << juftQiymat << endl;

  return 0;
}
```

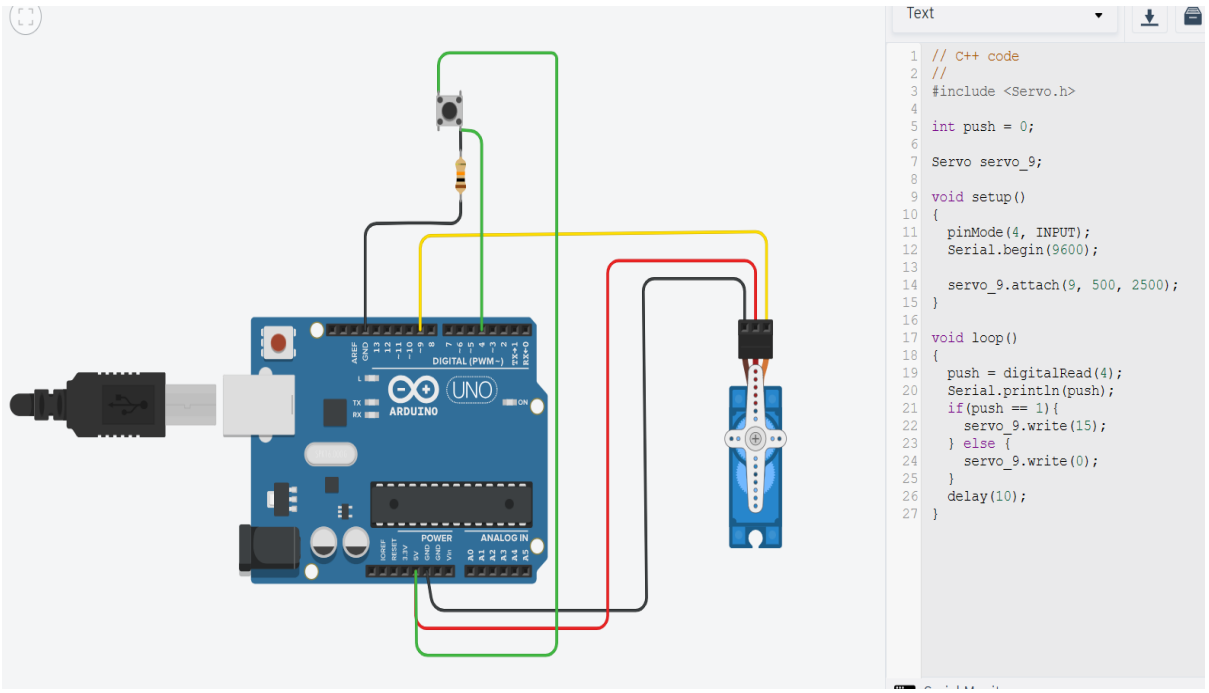
Variant № 11

Topshiriq № 1

Internet vositalari tizimi fanidan amaliy vazifa:

Tugma bosilganda servoprivod 15 gradusga o’girilishi dasturini tuzing.





Dastur kodi:

```
#include <Servo.h>
int push = 0;
Servo servo_9;
void setup()
{
  pinMode(4, INPUT);
  Serial.begin(9600);

  servo_9.attach(9, 500, 2500);
}
void loop()
{
  push = digitalRead(4);
  Serial.println(push);
  if(push == 1){
    servo_9.write(15);
  }
```

```
 else {
   servo_9.write(0);
  }
 delay(10);
}
```

Topshiriq № 2

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Yilda 12 oy berigan. Shu oylarni faslarga ajratish

HTML

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
    <link rel="stylesheet">
</head>

<body>
    <form>
        <select class="month">
            <option></option>
            <option>Yanvar</option>
            <option>Fevral</option>
            <option>Mart</option>
            <option>Aprel</option>
            <option>May</option>
            <option>Iyun</option>
            <option>Iyul</option>
            <option>Avgust</option>
            <option>Sentabr</option>
            <option>Oktabr</option>
            <option>Noyabr</option>
            <option>Dekabr</option>
        </select>
```

```
        <button type="button" class="btn">Fasllarga
ajratish</button>
        <p class="info"></p>
    </form>
    <script src="./script.js"></script>
</body>
</html>
```

JS

```
const selectedMonth = document.querySelector(".month");
const button = document.querySelector(".btn");
const info = document.querySelector(".info");

let month;

selectedMonth.addEventListener("click", (e) => {
  month = e.target.value;
});
button.addEventListener("click", () => {
  switch (month) {
    case "Dekabr":
    case "Yanvar":
    case "Fevral":
      info.innerHTML = "Qish fasli";
      break;
    case "Mart":
    case "Aprel":
    case "May":
      info.innerHTML = "Bahor fasli";
      break;
    case "Iyun":
    case "Iyul":
    case "Avgust":
      info.innerHTML = "Yoz fasli";
      break;
    case "Sentabr":
    case "Oktabr":
    case "Noyabr":
      info.innerHTML = "Kuz fasli";
      break;
```

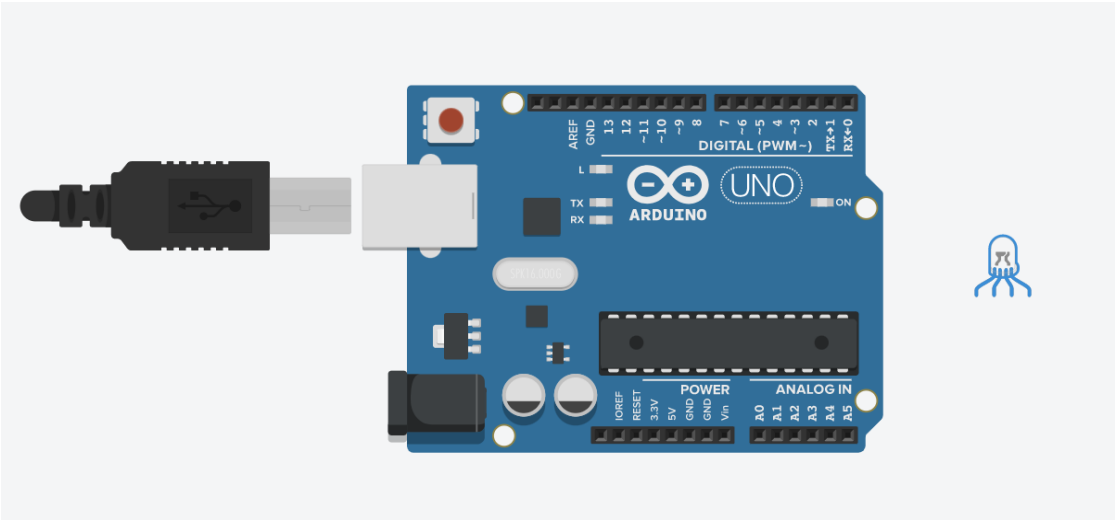
```
    default:
      info.innerHTML = "Bunday oy mavjud emas";
      break;
  }
});
```

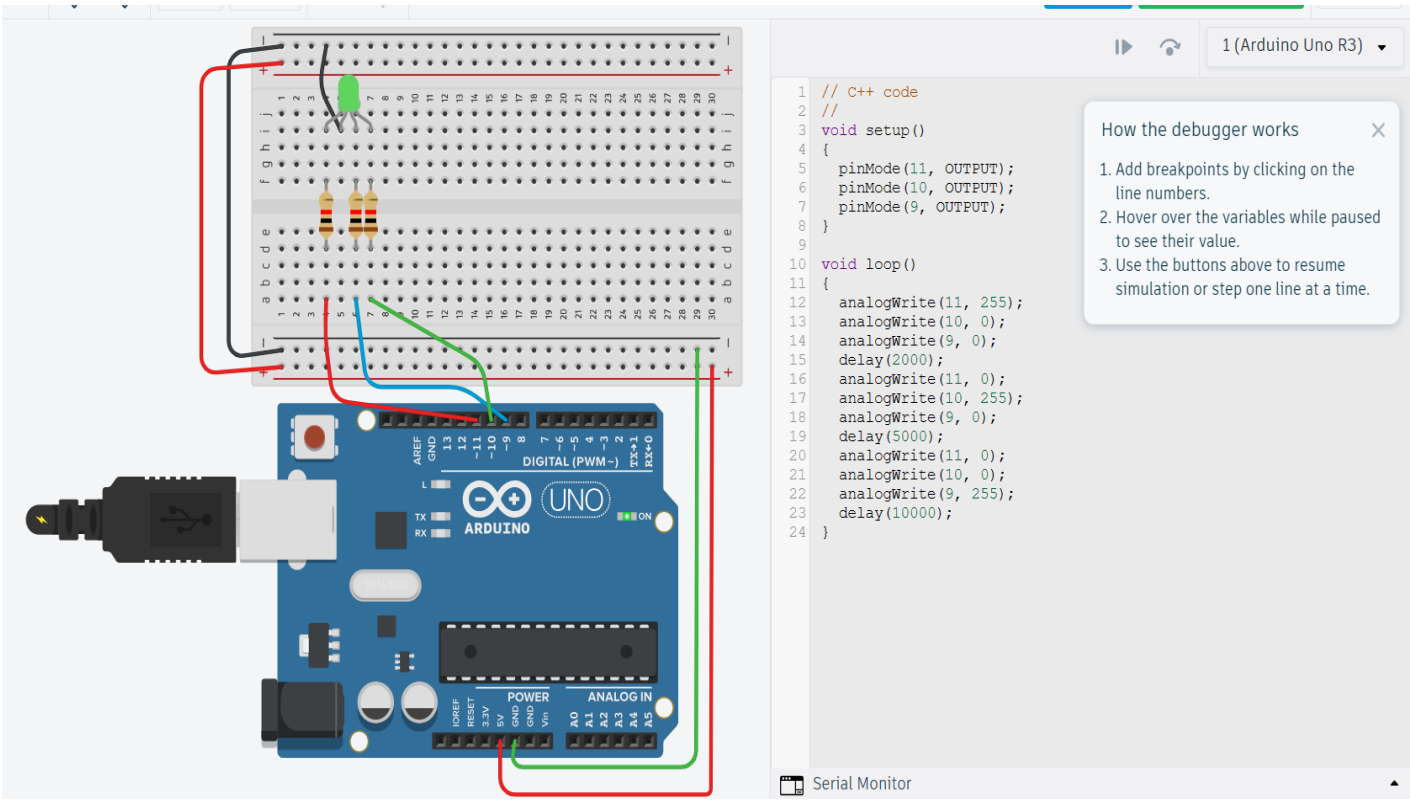
Variant № 12

Topshiriq № 1

Internet vositalari tizimi fanidan amaliy vazifa:

Arduino platasini yoqganingizda, RGB LED qizil yonadi, keyin ko'k, keyin yashil yonadi. Qizil 2 soniya, ko'k 5 soniya, yashil 10 soniya yonadigan dastur tuzing.





Dastur kodi:

```
void setup()
{
  pinMode(11, OUTPUT);
  pinMode(10, OUTPUT);
  pinMode(9, OUTPUT);
}
void loop()
{
  analogWrite(11, 255);
  analogWrite(10, 0);
  analogWrite(9, 0);
  delay(2000);
  analogWrite(11, 0);
  analogWrite(10, 255);
  analogWrite(9, 0);
  delay(5000);
  analogWrite(11, 0);
  analogWrite(10, 0);
  analogWrite(9, 255);
  delay(10000);
}
```

Topshiriq № 2

Internet ilovalarni ishlab chiqish fanidan fanidan amaliy vazifa:

Dollarni so‘mga va so‘mni dollarga o‘giradigan dasturni tuzing. Foydalanuvchi pulni kiritishi kerak bo‘ladi, <select> orqali kerakli valyuta konvertatsiyasini tanlash kerak bo‘ladi, va “o‘girish” tugmasini bosishi kerak bo‘ladi.

HTML

```html
<!DOCTYPE html>
<html>

<head>
    <title>Pul konvertori</title>
    <script src="./script.js"></script>
</head>

<body>
    <h1>Pul konvertori</h1>

    <label for="amount">Pul:</label>
    <input type="number" id="amount" step="0.01"><br><br>

    <label for="currency">Valyuta turini tanlang:</label>
    <select id="currency">
        <option value="usd-to-uzs">Dollarni So'mga:</option>
        <option value="uzs-to-usd">So'mni Dollarga:</option>
    </select><br><br>

    <button
onclick="convertCurrency()">Konvertatsiya</button><br><br>

    <div id="result"></div>
</body>
</html>
```

JS

```js
function convertCurrency() {
  var amount =
parseFloat(document.getElementById("amount").value);
  var currency = document.getElementById("currency").value;
  var result = 0;

  if (currency === "usd-to-uzs") {
    result = amount * 10500; // Dollarni so'mga nisbatan kursi
  } else if (currency === "uzs-to-usd") {
    result = amount / 10500; // So'mni dollarga nisbatan kursi
  }
  document.getElementById("result").innerHTML =
result.toFixed(2);
}
```