Ζάρια (6)-
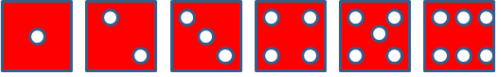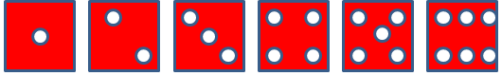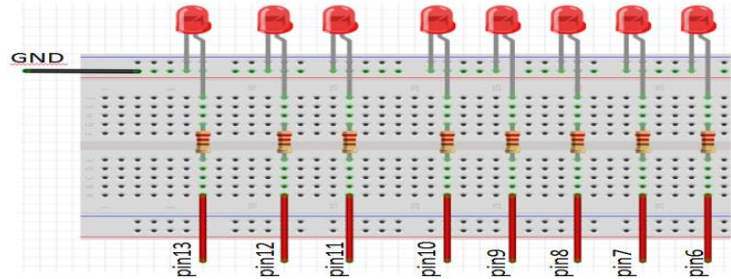
Να κατασκευάσετε το κύκλωμα με οκτώ led. Στη συνέχεια να αναπτύξετε τον κατάλληλο κώδικα ώστε:
Στην αρχή θα ανάβουν στη σειρά όλα τα ledαπο το πρώτο προς το τελευταίο και ανάποδα.
Μία γεννήτρια θα δίνει τιμές 1 – 6. Ανάλογα την τιμή που θα δώσει η γεννήτρια στις μεταβλητέςzΖ1 και z2
θα ανάβει το αντίστοιχο led 1 μέχρι 6 για το πρώτο ζάρι z1 και 1 μέχρι 6 για το δεύτερο ζάρι z2.
Όταν είναι το πρώτο ζάρι θα ανάβει το 7ο led για 2 δευτερόλεπτα.
Όταν είναι το πρώτο ζάρι θα ανάβει το 8ο led για 2 δευτερόλεπτα.
Τέλος θα ανάβουν και τα 8 led όλα μαζί για 2 δευτερόλεπτα και θα σβήνουν .

Τα υλικά που θα χρειαστούμε	Το κύκλωμα
Arduino **Καλώδια** **Οκτώ led Κόκκινα.** **οκτώ αντιστάσεις breadboard**	

Ο κώδικας

```
/* η αλλαγή στο πρόβλημα είναι η εξής. θα κάνει
τεστ απο πάνω προς τα κάτω και ανάποδα μετά θα
τρέχει η γεννήτρια και όταν έρθει π.χ. το 4 θα
ανάψουν τα τέσσερα πρώτα led και όχι μόνο το
τέταρτο!*/
int led1=13;
int led2=12;
int led3=11;
int led4=10;
int led5=9;
int led6=8;
int led7=7;
int led8=6;
int z1;
int z2;
void setup() {

  pinMode (led1, OUTPUT);
  pinMode (led2, OUTPUT);
  pinMode (led3, OUTPUT);
  pinMode (led4, OUTPUT);
  pinMode (led5, OUTPUT);
  pinMode (led6, OUTPUT);
  pinMode (led7, OUTPUT);
  pinMode (led8, OUTPUT);
}

void loop() {
digitalWrite (led1, HIGH);
 delay (500);
 digitalWrite (led1, LOW);
```

```
  digitalWrite (led2, HIGH);
 delay (500);
 digitalWrite (led2, LOW);

  digitalWrite (led3, HIGH);
 delay (500);
 digitalWrite (led3, LOW);

  digitalWrite (led4, HIGH);
 delay (500);
 digitalWrite (led4, LOW);

  digitalWrite (led5, HIGH);
 delay (500);
 digitalWrite (led5, LOW);

  digitalWrite (led6, HIGH);
 delay (500);
 digitalWrite (led6, LOW);

  digitalWrite (led7, HIGH);
 delay (500);
 digitalWrite (led7, LOW);

  digitalWrite (led8, HIGH);
 delay (500);
 digitalWrite (led8, LOW);
//anapoda--------------------------------
digitalWrite (led8, HIGH);
 delay (500);
 digitalWrite (led8, LOW);
 digitalWrite (led7, HIGH);
 delay (500);
 digitalWrite (led7, LOW);
  digitalWrite (led6, HIGH);
 delay (500);
 digitalWrite (led6, LOW);
 digitalWrite (led5, HIGH);
 delay (500);
 digitalWrite (led5, LOW);
digitalWrite (led4, HIGH);
 delay (500);
 digitalWrite (led4, LOW);
digitalWrite (led3, HIGH);
 delay (500);
 digitalWrite (led3, LOW);
 digitalWrite (led2, HIGH);
 delay (500);
 digitalWrite (led2, LOW);
 digitalWrite (led1, HIGH);
 delay (500);
 digitalWrite (led1, LOW);

//telos to test-----------------------------
z1=0;
 digitalWrite (led7, HIGH);
```

```
 delay (2000);
 digitalWrite (led7, LOW);

 z1 = random(1,7);

 if (z1==1) {
digitalWrite (led1, HIGH);
delay (2000);
digitalWrite (led1, LOW);
}

if (z1==2) {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
}

if (z1==3) {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);

}
if (z1==4)
 {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4,HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led4, LOW);
}
if (z1==5)
 {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4,HIGH);
digitalWrite (led5,HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led4, LOW);
digitalWrite (led5, LOW);
}
if (z1==6)
```

```
{
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4,HIGH);
digitalWrite (led5,HIGH);
digitalWrite (led6,HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led4, LOW);
digitalWrite (led5, LOW);
digitalWrite (led6, LOW);
}


z2=0;
 digitalWrite (led8, HIGH);
 delay (2000);
 digitalWrite (led8, LOW);
 z2 = random(1,7);
if (z2==1)
 {
digitalWrite (led1, HIGH);
delay (2000);
digitalWrite (led1, LOW);

}
if (z2==2)
 {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);

}
if (z2==3)
 {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);

}
if (z2==4)
 {
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4,HIGH);
delay (2000);
```

```
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led4, LOW);
}
if (z2==5)
{
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4,HIGH);
digitalWrite (led5,HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led4, LOW);
digitalWrite (led5, LOW);
}
if (z2==6)
{
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4,HIGH);
digitalWrite (led4, LOW);
digitalWrite (led5,HIGH);
digitalWrite (led6,HIGH);
delay (2000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led5, LOW);
digitalWrite (led6, LOW);
}
// 8a anapsoun gia 2 sec ola mazi
digitalWrite (led1, HIGH);
digitalWrite (led2, HIGH);
digitalWrite (led3, HIGH);
digitalWrite (led4, HIGH);
digitalWrite (led5, HIGH);
digitalWrite (led6, HIGH);
digitalWrite (led7, HIGH);
digitalWrite (led8, HIGH);

delay (1000);
digitalWrite (led1, LOW);
digitalWrite (led2, LOW);
digitalWrite (led3, LOW);
digitalWrite (led4, LOW);
digitalWrite (led5, LOW);
digitalWrite (led6, LOW);
digitalWrite (led7, LOW);
digitalWrite (led8, LOW);
}
```