

TOYCATHON
TURBOFUTURE
(Smart Dice)
Display Code

```
byte ONE[] = {  
    B00010000,  
    B00011000,  
    B00010100,  
    B00010000,  
    B00010000,  
    B00010000,  
    B01111110,  
    B00000000};
```

```
byte TWO[] = {  
    B00011100,  
    B00100010,  
    B00100000,  
    B00010000,  
    B00001000,  
    B00000100,  
    B01111110,  
    B00000000};
```

```
byte FOUR[] = {  
    B00010000,  
    B00011000,  
    B00010100,  
    B00010010,  
    B01111111,  
    B00010000,  
    B00010000,  
    B00000000};
```

```
byte THREE[] = {  
    B01111100,  
    B00100000,  
    B00010000,  
    B00111000,  
    B01000000,  
    B01000100,  
    B00111000,  
    B00000000};
```

```
byte FIVE[] = {  
    B01111100,
```

```
B00000100,  
B00000100,  
B00111100,  
B01000000,  
B01000000,  
B00111100,  
B00000000};
```

```
byte SIX[] = {  
B00010000,  
B00001000,  
B00000100,  
B00011110,  
B00100010,  
B00100010,  
B00011100,  
B00000000};
```

```
byte random1[] = {  
B01010101,  
B10101010,  
B01010101,  
B10101010,  
B01010101,  
B10101010,  
B01010101,
```

```
B10101010};
```

```
byte random2[] = {  
  B10101010,  
  B01010101,  
  B10101010,  
  B01010101,  
  B10101010,  
  B01010101,  
  B10101010,  
  B01010101};
```

```
#include <SPI.h>  
const int columnPins[] = {6, 12, 11, 3, 16, 4, 8, 10};  
//const int rowPins[] = {2, 7, 18, 5, 14, 17, 13, 15};  
void setup() {  
  
  Serial.begin(9600);  
  for (int i = 0; i < 8; i++)  
  {  
    pinMode(rowPins[i], OUTPUT);  
    pinMode(columnPins[i], OUTPUT);  
    digitalWrite(columnPins[i], LOW);  
  }  
}
```

```
void loop()
{

    int Delay = 500;
    show (ONE, 5000);
    show (TWO, 5000);
    show (THREE, 5000);
    show (FOUR, 5000);
    show (FIVE, 5000);
    show (SIX, 5000);

    delay(Delay);
}
```

```
void randomeffect()
{
    for(int a=0;a<2;a++)
    {
        show(random1,50);
        delay(40);
        show(random2,50);
        delay(40);
    }
}
```

```
void show( byte * image, unsigned long duration)
```

```
{  
  unsigned long start = millis();  
  while (start + duration > millis())  
  {  
    for(int row = 0; row < 8; row++)  
    {  
      digitalWrite(rowPins[row], HIGH);  
  
      for(int column = 0; column < 8; column++)  
      {  
        boolean pixel = bitRead(image[row],column);  
        if(pixel == 1)  
        {  
          digitalWrite(columnPins[column], LOW);  
        }  
        delayMicroseconds(300);  
        digitalWrite(columnPins[column], HIGH);  
      }  
      digitalWrite(rowPins[row], LOW);  
    }  
  }  
}
```