```
//Auto to arxeio perilamvanei olokliro to programma
 #include <SoftwareSerial.h> //vivliothiki seiriaki epikoinwnia
 // D , C , B , A e3odoi arduino pros to 7447
 //metavlites
int Blue1=6; // e3odos gia to Mple xrwma
int Red1=3; //e3odos gia to kokkino xrwma
int Green1=5; //e3odos gia to prasino xrwma
int button=2; // button eidopoihshs
int D11 = 11; // psifiaki e3odos pros 7447 IC...sto 7-segment sto D
int D10 = 10; // psifiaki e3odos pros 7447 IC...sto 7-segment sto C
int D09 = 9 ;// psifiaki e3odos pros 7447 IC ... sto 7 segment sto B
int D08 = 8 ;// psifiaki e3odos pros 7447 IC ...sto 7 segment sto A
int room ; // metavliti toy dwmatiou
int flag;
 //xarakthrizw eisodous eksodous
void setup ()
   pinMode ( D11 , OUTPUT ); // e3odos 11 ---> to pin D toy IC
   pinMode ( D10 , OUTPUT ); // e3odos 10 ----> to pin C toy IC
   pinMode ( D09 , OUTPUT ); // e3odos 09 ----> to pin B toy IC
   pinMode ( D08 , OUTPUT ); // e3odos 08 ----> to pin A toy IC
   pinMode ( Red1 , OUTPUT ); // e3odos 03 Analog -----> to Red pin toy RGB
led common cathode
   pinMode ( Green1 , OUTPUT );// e3odos 05 Analog ----> to Green pin toy
RGB led common cathode
   pinMode (Blue1, OUTPUT); // e3odos 06 Analog ----> to Mple pin toy
RGB led common cathode
   pinMode (button, INPUT); // eisodos 02 -----> button eisodoy
kampinas
   Serial.begin (9600);
//kanei kykloys ton kwdika
void loop ()
 setSegment( 1,1,1,1); // keno psifio ---> den anavei katholou to led display
  setColor (0,0,0); // svinei to RGB led
Serial.println ("Give the Room number: ");
while (Serial.available() == 0 ) {}
room = Serial.parseInt();
 if (room == 11174)
 setSegment(0,1,0,0); // D , C , B, A
 setColor(255,0,0); // BLUE , RED , GREEN ----> blue
 Serial.println(" The 11174 Cabin has code: 4 BLUE ");
 while(digitalRead(button) == LOW ) { }
else if ( room == 11175 )
 setSegment(0,1,0,1); // D , C , B, A
 setColor(0,100,20); // BLUE , RED , GREEN ---> yellow
 Serial.println(" The 11175 Cabin has code: 5 YELLOW ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11176)
 setSegment(0,1,1,0); // D , C , B, A
 setColor(0,255,0); // BLUE , RED , GREEN ----> red
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Serial.println(" The 11176 Cabin has code: 6 RED ");
  while(digitalRead(button) == LOW ) { }
 }
 else if ( room == 11177 )
 {
  \mathtt{setSegment} \; (\texttt{0,1,1,1}) \; ; \; \; // \; \texttt{D} \; \; , \; \texttt{C} \; \; , \; \texttt{B,} \; \; \texttt{A}
  setColor(50,100,0); // BLUE , RED , GREEN -----> PURPLE
  Serial.println(" The 11177 Cabin has code: 7 PURPLE ");
  while(digitalRead(button) == LOW ) { }
 }
 else if (room == 11178)
 {
  setSegment(1,0,0,0); // D , C , B, A
  setColor(0,0,255); // BLUE , RED , GREEN -----> GREEN
  Serial.println(" The 11178 Cabin has code: 8 GREEN ");
  while(digitalRead(button) == LOW ) { }
 }
 else if (room == 11179)
 {
  setSegment(1,0,0,1); // D , C , B, A
  setColor(255,255,255); // BLUE , RED , GREEN -----> WHITE
  Serial.println(" The 11179 Cabin has code: 9 WHITE ");
  while(digitalRead(button) == LOW ) { }
 }
 else if ( room == 11180 )
  setSegment(0,0,0,0); // D , C , B, A
  setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
  Serial.println(" The 11180 Cabin has code: 0 YELLOW ");
  while(digitalRead(button) == LOW ) { }
else if (room == 11181)
  setSegment(0,0,0,1); // D , C , B, A
  setColor(255,0,0); // BLUE , RED , GREEN -----> BLUE
  Serial.println(" The 11181 Cabin has code: 1 BLUE ");
  while(digitalRead(button) == LOW ) { }
else if (room == 11182)
  \mathtt{setSegment} \hspace{.05cm} (\texttt{0,0,1,0)} \hspace{.1cm} ; \hspace{.1cm} // \hspace{.1cm} \texttt{D} \hspace{.1cm} , \hspace{.1cm} \texttt{C} \hspace{.1cm} , \hspace{.1cm} \texttt{B,} \hspace{.1cm} \texttt{A}
  setColor(50, 100,0); // BLUE, RED, GREEN ---> PURPLE
   Serial.println(" The 11182 Cabin has code: 2 PURPLE ");
   while(digitalRead(button) == LOW ) { }
 }
 else if (room == 11183)
  setSegment(0,0,1,1); // D , C , B, A
  setColor(0, 255 ,0); // BLUE , RED , GREEN ----> RED
   Serial.println(" The 11183 Cabin has code: 3 RED ");
   while(digitalRead(button) == LOW ) { }
 }
 else if (room == 11184)
  setSegment(0,1,0,0); // D , C , B, A
  setColor(255, 255, 255); // BLUE , RED , GREEN ----> WHITE
   Serial.println(" The 11184 Cabin has code: 4 WHITE ");
   while(digitalRead(button) == LOW ) { }
  else if (room == 11185)
  setSegment(0,1,0,1); // D, C, B, A
  setColor(0,0,255); // BLUE , RED , GREEN ---> GREEN
   Serial.println(" The 11185 Cabin has code: 5 GREEN ");
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while(digitalRead(button) == LOW ) { }
}
else if (room == 11186)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(" The 11186 Cabin has code: 6 BLUE ");
 while(digitalRead(button) == LOW ){}
}
else if (room == 11187)
{
setSegment(0,1,1,1); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(" The 11187 Cabin has code: 7 YELLOW ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11188)
{
setSegment(1,0,0,0); // D , C , B, A
setColor(0,255 , 0); // BLUE , RED , GREEN ----> RED
 Serial.println(" The 11188 Cabin has code: 8 RED ");
 while(digitalRead(button) == LOW ) { }
}
else if (room == 11189)
setSegment(1,0,0,1); // D, C, B, A
setColor(50 ,100, 0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(" The 11189 Cabin has code: 9 PURPLE ");
 while(digitalRead(button) == LOW ){}
else if (room == 11190)
setSegment(0,0,0,0); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(" The 11190 Cabin has code: 0 GREEN ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11191)
setSegment(0,0,0,1); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(" The 11191 Cabin has code: 1 WHITE ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11192)
{
setSegment(0,0,1,0); // D, C, B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(" The 11192 Cabin has code: 2 YELLOW ");
 while(digitalRead(button) == LOW ) { }
}
else if (room == 11193)
setSegment(0,0,1,1); // D , C , B, A
setColor(255, 0, 0); // BLUE, RED, GREEN ----> BLUE
 Serial.println(" The 11193 Cabin has code: 3 BLUE ");
 while(digitalRead(button) == LOW ) { }
}
else if (room == 11194)
setSegment(0,1,0,0); // D , C , B, A
setColor(50 ,100, 0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(" The 11194 Cabin has code: 4 PURPLE ");
 while(digitalRead(button) == LOW ) { }
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}
else if (room == 11195)
{
setSegment(0,1,0,1); // D , C , B, A
setColor(0,255, 0); // BLUE , RED , GREEN ----> RED
 Serial.println(" The 11195 Cabin has code: 5 RED ");
 while(digitalRead(button) == LOW ){}
else if (room == 11196)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(" The 11196 Cabin has code: 6 WHITE ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11197)
{
setSegment(0,1,1,1); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ---> GREEN
 Serial.println(" The 11197 Cabin has code: 7 GREEN ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11198)
{
setSegment(1,0,0,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(" The 11198 Cabin has code: 8 BLUE");
 while(digitalRead(button) == LOW ) { }
else if (room == 11199)
setSegment(1,0,0,1); // D, C, B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(" The 11199 Cabin has code: 9 YELLOW ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11200)
setSegment(0,0,0,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(" The 11200 Cabin has code: 0 RED ");
 while(digitalRead(button) == LOW ) { }
else if (room == 11201)
setSegment(0,0,0,1); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(" The 11201 Cabin has code: 1 PURPLE ");
 while(digitalRead(button) == LOW ) { }
}
else if (room == 11202)
{
setSegment(0,0,1,0); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(" The 11202 Cabin has code: 2 GREEN ");
 while(digitalRead(button) == LOW ) { }
}
else if (room == 11203)
setSegment(0,0,1,1); // D, C, B, A
setColor(255,255,255); // BLUE , RED , GREEN ---> WHITE
 Serial.println(" The 11203 Cabin has code: 3 WHITE ");
 while(digitalRead(button) == LOW ) { }
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else if (room == 11204)
{
setSegment(0,1,0,0); // D , C , B, A
\mathtt{setColor}(0 \ , \ 100 \ , \ 20); \ // \ \mathtt{BLUE} \ , \ \mathtt{RED} \ , \ \mathtt{GREEN} \ ----> \ \mathtt{YELLOW}
 Serial.println(" The 11204 Cabin has code: 4 YELLOW ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11205)
{
\mathtt{setSegment} \, (\texttt{0,1,0,1}) \, ; \, \, // \, \, \mathtt{D} \, \, , \, \, \mathtt{C} \, \, , \, \, \mathtt{B,} \, \, \, \mathtt{A}
setColor(255, 0 ,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(" The 11205 Cabin has code: 5 BLUE ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11206)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(50 , 100 ,0 ); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(" The 11206 Cabin has code: 6 PURPLE ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11207)
{
setSegment(0,1,1,1); // D , C , B, A
setColor(0 , 255 ,0 ); // BLUE , RED , GREEN ----> RED
 Serial.println(" The 11207 Cabin has code: 7 RED ");
 while(digitalRead(button) == LOW ){}
 else if (room == 11208)
{
\mathtt{setSegment}\,(1,0,0,0)\,;\ //\ \mathtt{D}\ ,\ \mathtt{C}\ ,\ \mathtt{B},\ \mathtt{A}
setColor(255, 255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(" The 11208 Cabin has code: 8 WHITE ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11209)
setSegment(1,0,0,1); // D, C, B, A
setColor(0,0,255); // BLUE, RED, GREEN ----> GREEN
 Serial.println(" The 11209 Cabin has code: 9 GREEN ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11210)
setSegment(0,0,0,0); // D , C , B, A
setColor(255, 0 ,0 ); // BLUE , RED , GREEN ----> BLUE
 Serial.println(" The 11210 Cabin has code: 0 BLUE ");
 while(digitalRead(button) == LOW ) { }
}
  else if (room == 11211)
setSegment(0,0,0,1); // D , C , B, A
setColor(0, 100, 20); // BLUE, RED, GREEN ----> YELLOW
 Serial.println(" The 11211 Cabin has code: 1 YELLOW ");
 while(digitalRead(button) == LOW){}
}
   else if (room == 11212)
setSegment(0,0,1,0); // D , C , B, A
setColor(0, 255, 0); // BLUE , RED , GREEN ----> RED
 Serial.println(" The 11212 Cabin has code: 2 RED ");
 while(digitalRead(button) == LOW ) { }
 else if (room == 11213)
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{
 setSegment(0,0,1,1); // D , C , B, A
 setColor(50 ,100, 0 ); // BLUE , RED , GREEN ----> PURPLE
   Serial.println(" The 11213 Cabin has code: 3 PURPLE ");
  while(digitalRead(button) == LOW ) { }
   else if (room == 11214)
 {
 setSegment(0,1,0,0); // D , C , B, A
 setColor(0, 0 , 255); // BLUE , RED , GREEN ----> GREEN
  Serial.println(" The 11214 Cabin has code: 4 GREEN ");
   while(digitalRead(button) == LOW ) { }
   else if (room == 11215)
 {
 setSegment(0,1,0,1); // D , C , B, A
 setColor(255, 255, 255); // BLUE , RED , GREEN ----> WHITE
  Serial.println(" The 11215 Cabin has code: 5 WHITE ");
   while(digitalRead(button) == LOW ) { }
   else if (room == 11216)
 {
 setSegment(0,1,1,0); // D , C , B, A
 setColor(0, 100,20); // BLUE , RED , GREEN ----> YELLOW
  Serial.println(" The 11216 Cabin has code: 6 YELLOW ");
  while(digitalRead(button) == LOW ) { }
   else if (room == 11217)
 setSegment(0,1,1,1); // D , C , B, A
 setColor(255, 0,0); // BLUE , RED , GREEN ----> BLUE
  Serial.println(" The 11217 Cabin has code: 7 BLUE ");
   while(digitalRead(button) == LOW ){}
 else if (room == 11218)
  \begin{array}{l} \texttt{setSegment}\,(1,0,0,0)\,; \ //\ \texttt{D}\ ,\ \texttt{C}\ ,\ \texttt{B},\ \texttt{A} \\ \texttt{setColor}\,(50,\ 100,\ 0)\,; \ \ //\ \texttt{BLUE}\ ,\ \texttt{RED}\ ,\ \texttt{GREEN}\ ---->\ \texttt{PURPLE} \\ \end{array} 
  Serial.println(" The 11218 Cabin has code: 8 PURPLE ");
   while(digitalRead(button) == LOW ) { }
 else if (room == 11220)
 setSegment(0,0,0,0); // D , C , B, A
setColor(255, 255, 255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(" The 11220 Cabin has code: 0 WHITE ");
  while(digitalRead(button) == LOW ) { }
 else if (room == 11222)
 setSegment(0,0,1,0); // D , C , B, A
 setColor(255, 0 , 0); // BLUE , RED , GREEN ----> BLUE
  Serial.println(" The 11222 Cabin has code: 2 BLUE ");
  while(digitalRead(button) == LOW ) { }
 else if (room == 11224)
 setSegment(0,1,0,0); // D , C , B, A
 setColor(0, 255, 0); // BLUE , RED , GREEN ----> RED
  Serial.println(F(" The 11224 Cabin has code: 4 RED "));
  while(digitalRead(button) == LOW ) { }
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else if (room == 11226)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(0, 0, 255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11226 Cabin has code: 6 GREEN "));
 while(digitalRead(button) == LOW ) { }
 else if (room == 11229)
{
setSegment(1,0,0,1); // D , C , B, A
setColor(0, 255, 0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11229 Cabin has code: 9 RED "));
 while(digitalRead(button) == LOW ) { }
   else if (room == 11230)
{
setSegment(0,0,0,0); // D , C , B, A
setColor(50,100, 0); // BLUE , RED , GREEN ---> PURPLE
 Serial.println(F(" The 11230 Cabin has code: 0 PURPLE "));
 while(digitalRead(button) == LOW ) { }
  else if (room == 11231)
{
setSegment(0,0,0,1); // D, C, B, A
setColor(0 ,0 ,255); // BLUE , RED , GREEN ---->GREEN
 Serial.println(F(" The 11231 Cabin has code: 1 GREEN "));
 while(digitalRead(button) == LOW ) { }
  else if (room == 11232)
setSegment(0,0,1,0); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11232 Cabin has code: 2 WHITE "));
 while(digitalRead(button) == LOW ) { }
else if (room == 11233)
setSegment(0,0,1,1); // D , C , B, A
setColor(0,100,20);
                     // BLUE , RED , GREEN ---> YELLOW
 Serial.println(F(" The 11233 Cabin has code: 3 YELLOW "));
 while(digitalRead(button) == LOW ) { }
else if (room == 11235)
{
setSegment(0,1,0,1); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11235 Cabin has code: 5 PURPLE "));
 while(digitalRead(button) == LOW ) { }
}
else if (room == 11236)
setSegment(0,1,1,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11235 Cabin has code: 6 RED "));
 while(digitalRead(button) == LOW ) { }
}
 else if (room == 11237)
setSegment(0,1,1,1); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ---> WHITE
 Serial.println(F(" The 11237 Cabin has code: 7 WHITE "));
 while(digitalRead(button) == LOW ) { }
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else if (room == 11239)
{
setSegment(1,0,0,1); // D , C , B, A
\mathtt{setColor}(255,0,0); // \mathtt{BLUE} , \mathtt{RED} , \mathtt{GREEN} ----> \mathtt{BLUE}
 Serial.println(F(" The 11237 Cabin has code: 9 BLUE "));
 while(digitalRead(button) == LOW ) { }
   else if (room == 11240)
setSegment(0,0,0,0); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11237 Cabin has code: 0 YELLOW "));
 while(digitalRead(button) == LOW ) { }
   else if (room == 11241)
{
setSegment(0,0,0,1); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11237 Cabin has code: 1 RED "));
 while(digitalRead(button) == LOW ) { }
    else if (room == 11243)
{
setSegment(0,0,1,1); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11243 Cabin has code: 3 GREEN "));
 while(digitalRead(button) == LOW ){}
     else if (room == 11244)
setSegment(0,1,0,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11244 Cabin has code: 4 BLUE "));
 while(digitalRead(button) == LOW ) { }
     else if (room == 11245)
setSegment(0,1,0,1); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11245 Cabin has code: 5 YELLOW "));
 while(digitalRead(button) == LOW ) { }
     else if (room == 11247)
{
setSegment(0,1,0,1); // D , C , B, A
setColor(0,100,20);
                     // BLUE , RED , GREEN ---> PURPLE
 Serial.println(F(" The 11247 Cabin has code: 7 PURPLE "));
 while(digitalRead(button) == LOW ) { }
}
      else if (room == 11249)
{
setSegment(1,0,0,1); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11249 Cabin has code: 9 WHITE "));
 while(digitalRead(button) == LOW){}
}
       else if (room == 11250)
setSegment(1,0,0,1); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11250 Cabin has code: 0 GREEN "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11251)
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{
setSegment(0,0,0,1); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11251 Cabin has code: 1 BLUE "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11252)
{
setSegment(0,0,1,0); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11252 Cabin has code: 2 PURPLE "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11253)
{
setSegment(0,0,1,1); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11253 Cabin has code: 3 RED "));
 while(digitalRead(button) == LOW ) { }
       else if (room == 11254)
{
setSegment(0,1,0,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11254 Cabin has code: 4 WHITE "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11255)
setSegment(0,1,0,1); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11255 Cabin has code: 5 GREEN "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11260)
setSegment(0,0,0,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11260 Cabin has code: 0 RED "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11262)
setSegment(0,0,1,0); // D , C , B, A
\mathtt{setColor}(0,100,20); // \mathtt{BLUE} , \mathtt{RED} , \mathtt{GREEN} ----> \mathtt{YELLOW}
 Serial.println(F(" The 11262 Cabin has code: 2 YELLOW "));
 while(digitalRead(button) == LOW ) { }
}
         else if (room == 11264)
{
setSegment(0,1,0,0); // D , C , B, A
setColor(50,100,0);
                      // BLUE , RED , GREEN ---> PURPLE
 Serial.println(F(" The 11264 Cabin has code: 4 PURPLE "));
 while(digitalRead(button) == LOW ){}
}
          else if (room == 11266)
setSegment(0,1,1,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ---> BLUE
 Serial.println(F(" The 11266 Cabin has code: 6 BLUE "));
 while(digitalRead(button) == LOW ) { }
          else if (room == 11268)
{
```

```
setSegment(1,0,0,0); // D , C , B, A
\mathtt{setColor}(0,100,20); // \mathtt{BLUE} , \mathtt{RED} , \mathtt{GREEN} ----> \mathtt{YELLOW}
 Serial.println(F(" The 11268 Cabin has code: 8 YELLOW "));
 while(digitalRead(button) == LOW ) { }
          else if (room == 11270)
{
\mathtt{setSegment}\,(\mathtt{0,0,0,0})\,;\ //\ \mathtt{D}\ ,\ \mathtt{C}\ ,\ \mathtt{B},\ \mathtt{A}
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11270 Cabin has code: 0 BLUE "));
 while(digitalRead(button) == LOW ) { }
           else if (room == 11272)
{
setSegment(0,0,1,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ---> GREEN
 Serial.println(F(" The 11272 Cabin has code: 2 GREEN "));
 while(digitalRead(button) == LOW ) { }
           else if (room == 11273)
{
setSegment(0,0,1,1); // D, C, B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11273 Cabin has code: 3 BLUE "));
 while(digitalRead(button) == LOW ) { }
            else if (room == 11274)
{
setSegment(0,1,0,0); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11274 Cabin has code: 4 YELLOW "));
 while(digitalRead(button) == LOW ) { }
}
             else if (room == 11275)
setSegment(0,1,0,1); // D, C, B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11275 Cabin has code: 5 RED "));
 while(digitalRead(button) == LOW ) { }
            else if (room == 11276)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11276 Cabin has code: 6 WHITE "));
 while(digitalRead(button) == LOW ) { }
}
             else if (room == 11277)
setSegment(0,1,1,1); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11277 Cabin has code: 7 YELLOW "));
 while(digitalRead(button) == LOW ) { }
}
             else if (room == 11278)
setSegment(1,0,0,0); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11278 Cabin has code: 8 GREEN "));
 while(digitalRead(button) == LOW ) { }
}
             else if (room == 11280)
setSegment(0,0,0,0); // D , C , B, A
```

```
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11280 Cabin has code: 0 WHITE "));
 while(digitalRead(button) == LOW ) { }
             else if (room == 11282)
{
\mathtt{setSegment}\,(\mathtt{0,0,1,0})\,;\ //\ \mathtt{D}\ ,\ \mathtt{C}\ ,\ \mathtt{B},\ \mathtt{A}
\mathtt{setColor}(0,255,0); // \mathtt{BLUE} , \mathtt{RED} , \mathtt{GREEN} ----> \mathtt{RED}
 Serial.println(F(" The 11282 Cabin has code: 2 RED "));
 while(digitalRead(button) == LOW ) { }
}
             else if (room == 11284)
setSegment(0,1,0,0); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11284 Cabin has code: 4 GREEN "));
 while(digitalRead(button) == LOW ) { }
             else if (room == 11286)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11286 Cabin has code: 6 PURPLE "));
 while(digitalRead(button) == LOW ) { }
}
             else if (room == 11288)
setSegment(1,0,0,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11288 Cabin has code: 8 RED "));
 while(digitalRead(button) == LOW ) { }
            else if (room == 11290)
setSegment(0,0,0,0); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11290 Cabin has code: 0 PURPLE "));
 while(digitalRead(button) == LOW ) { }
             else if (room == 11292)
setSegment(0,0,1,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11292 Cabin has code: 2 BLUE "));
 while(digitalRead(button) == LOW ) { }
            else if (room == 11293)
{
setSegment(0,0,1,1); // D, C, B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11293 Cabin has code: 3 WHITE "));
 while(digitalRead(button) == LOW ) { }
}
          else if (room == 11294)
setSegment(0,1,0,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11294 Cabin has code: 4 RED "));
 while(digitalRead(button) == LOW ) { }
         else if (room == 11295)
setSegment(0,1,0,1); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ---> BLUE
```

```
Serial.println(F(" The 11295 Cabin has code: 5 BLUE "));
 while(digitalRead(button) == LOW ) { }
      else if (room == 11296)
{
\mathtt{setSegment} \hspace{.05cm} (\texttt{0,1,1,0)} \hspace{.1cm} ; \hspace{.1cm} // \hspace{.1cm} \texttt{D} \hspace{.1cm} , \hspace{.1cm} \texttt{C} \hspace{.1cm} , \hspace{.1cm} \texttt{B,} \hspace{.1cm} \texttt{A}
\mathtt{setColor}(0,100,20); // \mathtt{BLUE} , \mathtt{RED} , \mathtt{GREEN} ----> \mathtt{YELLOW}
 Serial.println(F(" The 11296 Cabin has code: 6 YELLOW "));
 while(digitalRead(button) == LOW ){}
}
      else if (room == 11297)
{
 setSegment(0,1,1,1); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11297 Cabin has code: 7 GREEN "));
 while(digitalRead(button) == LOW ) { }
      else if (room == 11298)
{
setSegment(1,0,0,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11298 Cabin has code: 8 BLUE "));
 while(digitalRead(button) == LOW ) { }
      else if (room == 11299)
{
setSegment(1,0,0,1); // D, C, B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11299 Cabin has code: 9 PURPLE "));
 while(digitalRead(button) == LOW ){}
}
       else if (room == 11300)
setSegment(0,0,0,0); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11300 Cabin has code: 0 YELLOW "));
  while(digitalRead(button) == LOW ) { }
     else if (room == 11301)
{
setSegment(0,0,0,1); // D , C , B, A setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11301 Cabin has code: 1 WHITE "));
 while(digitalRead(button) == LOW){}
}
      else if (room == 11302)
{
setSegment(0,0,1,0); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11302 Cabin has code: 2 WHITE "));
 while(digitalRead(button) == LOW ) { }
}
     else if (room == 11303)
 setSegment(0,0,1,1); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11303 Cabin has code: 3 PURPLE "));
 while(digitalRead(button) == LOW ) { }
     else if (room == 11304)
setSegment(0,1,0,0); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
  Serial.println(F(" The 11304 Cabin has code: 4 BLUE "));
```

```
while(digitalRead(button) == LOW ) { }
}
   else if (room == 11305)
{
setSegment(0,1,0,1); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11305 Cabin has code: 5 WHITE "));
 while(digitalRead(button) == LOW ) { }
}
  else if (room == 11306)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ---> GREEN
 Serial.println(F(" The 11306 Cabin has code: 6 GREEN "));
 while(digitalRead(button) == LOW ) { }
  else if (room == 11307)
{
setSegment(0,1,1,1); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11307 Cabin has code: 7 RED "));
 while(digitalRead(button) == LOW ) { }
}
   else if (room == 11308)
{
setSegment(1,0,0,0); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11308 Cabin has code: 8 WHITE "));
 while(digitalRead(button) == LOW ){}
    else if (room == 11309)
{
setSegment(1,0,0,1); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11309 Cabin has code: 9 YELLOW "));
 while(digitalRead(button) == LOW ) { }
    else if (room == 11310)
{
setSegment(0,0,0,0); // D , C , B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11310 Cabin has code: 0 GREEN "));
 while(digitalRead(button) == LOW ) { }
     else if (room == 11311)
{
setSegment(0,0,0,1); // D , C , B, A
setColor(50,100,0);
                     // BLUE , RED , GREEN ---> PURPLE
 Serial.println(F(" The 11311 Cabin has code: 1 PURPLE "));
 while(digitalRead(button) == LOW ) { }
}
     else if (room == 11312)
setSegment(0,0,1,0); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11312 Cabin has code: 2 PURPLE "));
 while(digitalRead(button) == LOW ) { }
}
     else if (room == 11313)
setSegment(0,0,1,1); // D , C , B, A
setColor(0,100,20);
                     // BLUE , RED , GREEN ---> YELLOW
 Serial.println(F(" The 11313 Cabin has code: 3 YELLOW "));
 while(digitalRead(button) == LOW ) { }
```

```
}
      else if (room == 11314)
{
setSegment(0,1,0,0); // D , C , B, A
setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
 Serial.println(F(" The 11314 Cabin has code: 4 WHITE "));
 while(digitalRead(button) == LOW ) { }
      else if (room == 11315)
{
setSegment(0,1,0,1); // D , C , B, A
setColor(0,100,50); // BLUE , RED , GREEN ---> PURPLE
 Serial.println(F(" The 11315 Cabin has code: 5 PURPLE "));
 while(digitalRead(button) == LOW ) { }
      else if (room == 11316)
{
setSegment(0,1,1,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11316 Cabin has code: 6 RED "));
 while(digitalRead(button) == LOW ) { }
       else if (room == 11317)
{
setSegment(0,1,1,1); // D , C , B, A
setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
 Serial.println(F(" The 11317 Cabin has code: 7 BLUE "));
 while(digitalRead(button) == LOW ) { }
       else if (room == 11318)
setSegment(1,0,0,0); // D , C , B, A
setColor(50,100,0); // BLUE , RED , GREEN ----> PURPLE
 Serial.println(F(" The 11318 Cabin has code: 8 PURPLE "));
 while(digitalRead(button) == LOW ) { }
        else if (room == 11319)
{
setSegment(1,0,0,1); // D, C, B, A
setColor(0,0,255); // BLUE , RED , GREEN ----> GREEN
 Serial.println(F(" The 11319 Cabin has code: 9 GREEN "));
 while(digitalRead(button) == LOW){}
}
        else if (room == 11320)
{
setSegment(0,0,0,0); // D , C , B, A
setColor(0,255,0); // BLUE , RED , GREEN ----> RED
 Serial.println(F(" The 11320 Cabin has code: 0 RED "));
 while(digitalRead(button) == LOW ) { }
}
         else if (room == 11321)
setSegment(0,0,0,1); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11321 Cabin has code: 1 YELLOW "));
 while(digitalRead(button) == LOW ) { }
}
        else if (room == 11322)
setSegment(0,0,1,0); // D , C , B, A
setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
 Serial.println(F(" The 11321 Cabin has code: 2 YELLOW "));
 while(digitalRead(button) == LOW ) { }
```

```
else if (room == 11323)
 {
  setSegment(0,0,1,1); // D , C , B, A
 \mathtt{setColor}(0,0,255); // \mathtt{BLUE} , \mathtt{RED} , \mathtt{GREEN} ----> \mathtt{GREEN}
  Serial.println(F(" The 11323 Cabin has code: 3 GREEN "));
  while(digitalRead(button) == LOW ) { }
        else if (room == 11324)
 {
  setSegment(0,1,0,0); // D , C , B, A
 setColor(50,100,0); // BLUE , RED , GREEN --->PURPLE
  Serial.println(F(" The 11324 Cabin has code: 4 PURPLE "));
  while(digitalRead(button) == LOW ) { }
        else if (room == 11325)
 {
 setSegment(0,1,0,1); // D , C , B, A
 setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
  Serial.println(F(" The 11325 Cabin has code: 5 YELLOW "));
  while(digitalRead(button) == LOW ) { }
        else if (room == 11326)
 {
 setSegment(0,1,1,0); // D , C , B, A
 setColor(255,0,0); // BLUE , RED , GREEN ----> BLUE
  Serial.println(F(" The 11326 Cabin has code: 6 BLUE "));
  while(digitalRead(button) == LOW ){}
        else if (room == 11327)
 {
 setSegment(0,1,1,1); // D , C , B, A
 setColor(255,255,255); // BLUE , RED , GREEN ----> WHITE
  Serial.println(F(" The 11327 Cabin has code: 7 WHITE "));
  while(digitalRead(button) == LOW){}
         else if (room == 11328)
 setSegment(1,0,0,0); // D , C , B, A
 setColor(0,100,20); // BLUE , RED , GREEN ----> YELLOW
  Serial.println(F(" The 11328 Cabin has code: 8 YELLOW "));
  while(digitalRead(button) == LOW ) { }
      else if (room == 11329)
 {
 setSegment(1,0,0,1); // D , C , B, A
 Serial.println(F(" The 11329 Cabin has code: 9 RED "));
  while(digitalRead(button) == LOW ) { }
 }
void setSegment ( int D , int C , int B , int A) //elegxw to segment vazw 0-1
  {
    digitalWrite ( D11, D);
    digitalWrite (D10 , C);
    digitalWrite (D09 , B);
    digitalWrite (D08 , A );
  void setColor(int PulseBlue1 , int PulseRed1 , int PulseGreen1) //rythmizw
tin entash sto kathe podaraki
 analogWrite (Blue1 , PulseBlue1); //analogikoi eksodoi
 analogWrite (Red1 , PulseRed1);
```

```
analogWrite (Green1 , PulseGreen1);
```