**Assignment -1**

**Tinkercad**

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| Assignment Date | 24 September 2022 |
| Student Name | Divyadharshini J A |
| Student Roll Number | 111919106009 |
| Maximum Marks | 2 Marks |

**Question-1:Make a smart home in tinkercad, using 2+ sensors, led, buzzer in single code and circuit.**

**Soln:**

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| --- |
| int t=2; |
| inte=3; |
| voidsetup() |
| { |
| Serial.begin(9600);pinMode(t,OUTPUT); |
| pinMode(e,INPUT);pinMode(12,OUTPUT); |
| } |
| voidloop() |
| { |
| digitalWrite(t,LOW); |
| digitalWrite(t,HIGH); |
| delayMicroseconds(10); |
| digitalWrite(t,LOW); |
| floatdur=pulseIn(e,HIGH); |
| floatdis=(dur\*0.0343)/2; |
| Serial.print("Distance is:"); |
| Serial.println(dis); |
| } |
| if(dis>=100) |
| { |
| digitalWrite(8,HIGH); |
| digitalWrite(7,HIGH); |
| } |
| if(dis>=100) |
| { |
| for(inti=0;i<=30000;i=i+10) |
| { |
| tone(12,i); |
| delay(1000); |
| noTone(12); |
| delay(1000); |
| } |
| } |
| double a=analogRead(A0); |
| double t=(((a/1024)\*5)-0.5)\*100;Serial.print("TempValue:"); |
| Serial.println(t); |
| delay(1000); |
| if(t>=100) |
| { |
| digitalWrite(8,HIGH); |
| digitalWrite(7,HIGH); |
| } |
| if(t>=100) |
| { |
| for(inti=0;i<=30000;i=i+10) |
| { |
| tone(12,i); |
| delay(1000); |
| noTone(12); |
| delay(1000); |
| } |
| } |
| if(t<100) |
| { |
| digitalWrite(8,LOW); |
| digitalWrite(7,LOW); |
| } |

