1. Write a program that makes a LED blink continually after the press of a button. Make sure that it blinks slow enough to observe. If you press the button again it should stop blinking.

```
bool on = false;
 1
 2
     void setup() {
 3
       // put your setup code here, to run once:
 4
 5
       pinMode(9, OUTPUT);
     }
 6
 7
 8
     void loop() {
 9
       // put your main code here, to run repeatedly:
       int btnPress = digitalRead(3);
10
       delay(500);
11
12
13
       if(btnPress){
14
         if(on) on = false;
15
         else on = true;
16
17
       if(on){
18
         digitalWrite(9, HIGH);
19
20
         delay(500);
         digitalWrite(9, LOW);
21
22
23
```

2. Name 3 digital functions in Arduino.

```
digitalRead()
digitalWrite()
pinMode()
```

3. What are the analog functions in Arduino and what are their respective ranges?

```
analogRead() – 10 bit (0-1023)
analogWrite() – 8 bit (0-255)
```