# CODES

Taking Picture Code:

```
• import RPi.GPIO as GPIO
• import time
• import os
• from PIL import Image
• from gtts import gTTS
• import googletrans as gt
• import RPi.GPIO as GPIO
• import time
•
•
•
• GPIO.setmode(GPIO.BCM)
•
• GPIO.setup(18, GPIO.IN, pull_up_down=GPIO.PUD_UP)
•
• while True:
• input_state = GPIO.input(18)
• if input_state == False:
• os.system('./webcam2.sh')
• message='picture is taken';
• language = 'en'
• print(message)
• myobj = gTTS(text=message, lang=language,
```

slow=False)

• myobj.save("welcome.mp3")

• os.system("mpg321 welcome.mp3")

•

• time.sleep(0.2)

Ultrasonic sensor Code:

• **import** RPi.GPIO as GPIO

• **import** time

• **import** os

• GPIO.setmode(GPIO.BCM)

•

• TRIG = 23

• ECHO = 24

•

• **print**("Distance Measurement In Progress")

•

• GPIO.setup(TRIG,GPIO.OUT)



• GPIO.setup(ECHO,GPIO.IN)

•

• GPIO.output(TRIG, False)

• **print**("Waiting For Sensor To Settle")

• time.sleep(2)

•

• GPIO.output(TRIG, True)

• time.sleep(0.00001)

• GPIO.output(TRIG, False)

•

• **while** GPIO.input(ECHO)==0:

• pulse_start = time.time()

•

• **while** GPIO.input(ECHO)==1:

• pulse_end = time.time()

•

• pulse_duration = pulse_end - pulse_start

• distance = pulse_duration*17150

• **if** distance >= 40 **and** distance <=150:

•

• distance = round(distance, 2)

• **print**("Distance:",distance,"cm")

• os.system('fswebcam -r 1280x720 --no-banner

image44.jpg')

• GPIO.cleanup()