

Program:

```
from machine import Pin
import utime
from time import sleep
from machine import PWM
pwm = PWM(Pin(0))
pwm.freq(50)
trigger = Pin(3, Pin.OUT)
echo = Pin(2, Pin.IN)
def setServoCycle (position):
    pwm.duty_u16(position)
    sleep(0.01)
def ultra():
    trigger.low()
    utime.sleep_us(2)
    trigger.high()
    utime.sleep_us(5)
    trigger.low()
    while echo.value() == 0:
        signaloff = utime.ticks_us()
    while echo.value() == 1:
        signalon = utime.ticks_us()
    timepassed = signalon - signaloff
    distance = (timepassed * 0.0343) / 2
    if(distance<100):
        print("THE SLOT IS OCCUPIED")
    else:
        print("THE SLOT IS free")
    print("please enter")
```

```

for pos in range(1000,9000,50):
    setServoCycle(pos)
    for pos in range(9000,1000,-50):
        setServoCycle(pos)
while True:
    ultra()
    utime.sleep(1)
beecceptor_url = "https://https://iotproject.free.beeceptor.com"
try:
    while True:
        print(f"Distance: {distance} cm")
        data = {"distance": distance}
        response = requests.post(beecceptor_url, json=data)
        if response.status_code == 200:
            print("Data sent to Beeceptor successfully")
        else:
            print(f"Failed to send data. Status code: {response.status_code}")
        time.sleep(1)

```

