|  |  |
| --- | --- |
| Cambridge Raspberry Jam | |
| Name |  |
| Age |  |
| Parent |  |

|  |  |
| --- | --- |
| Beginners worksheet #4 | |
| Project | Push button for physical input |
| Description | In this project you will learn how to wire and program a push button for physical input. |

|  |  |  |  |
| --- | --- | --- | --- |
| Tools required | | | |
| □ Raspberry Pi + SD Card | | □ 1 X Red LED |  |
| □ Keyboard |  | □ 1 X Blue LED |  |
| □ Monitor + HDMI cable | | □ 2 x 330 Ω resistors |  |
| □ Power supply |  | □ 5 x m/f jumper wires | |
| □ Breadboard |  | □ 4.7k Ω resistors | |
| □ Push button |  | □ 1 m/m jumper wire | |
|  |  |  | |
| D:\1_Personal\Rasberry Pi videos\Raw\10x10\Breadboard diagrams\4.png | | | |

|  |
| --- |
| Code |
| TURN ON THE LEDS “4\_button.py”  #!/usr/bin/python  import os  import time  import RPi.GPIO as GPIO  GPIO.setmode(GPIO.BCM)  GPIO.setwarnings(False)  GPIO.setup(10, GPIO.IN)  print("------------------")  print(" Button + GPIO ")  print("------------------")  print GPIO.input(10)  while True:  if ( GPIO.input(10) == False ):  print("Button Pressed")  os.system('date')  print GPIO.input(10)  time.sleep(5)  else:  os.system('clear')  print ("Waiting for you to press a button")  time.sleep(1) |
|  |
| 1. Change directory “cd Desktop/gpio\_python\_code/”  2. Create file “touch 4\_button.py”  3. Enter the code above code  Once complete “Ctrl + x” then “y” then “enter”  4. To run the python code “sudo python 4\_button.py” |