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

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| Beginners worksheet #5 | |
| Project | Interact with the user and input your choice. |
| Description | In this project you will controller either the red or blue led depending on what your chose. |

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| 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 |  | □ 1 4.7k Ω resistors | |
| □ Push Button |  | □ 1 m/m jumper wire | |
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| Code |
| TURN ON THE LEDS “6\_user\_input\_blink.py”  #!/usr/bin/python  import os  import time  import RPi.GPIO as GPIO  GPIO.setmode(GPIO.BCM)  GPIO.setwarnings(False)  GPIO.setup(17,GPIO.OUT)  GPIO.setup(27,GPIO.OUT)  #Setup variables for user input  led\_choice = 0  count = 0  os.system('clear')  print "Which LED would you like to blink"  print "1: Red?"  print "2: Blue?"  led\_choice = input("Choose your option: ")  if led\_choice == 1:  os.system('clear')  print "You picked the Red LED"  count = input("How many times would you like it to blink?: ")  while count > 0:  GPIO.output(27,GPIO.HIGH)  time.sleep(1)  GPIO.output(27,GPIO.LOW)  time.sleep(1)  count = count - 1    if led\_choice == 2:  os.system('clear')  print "You picked the Red LED"  count = input("How many times would you like it to blink?: ")  while count > 0:  GPIO.output(17,GPIO.HIGH)  time.sleep(1)  GPIO.output(17,GPIO.LOW)  time.sleep(1)  count = count – 1 |
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| 1. Change directory “cd Desktop/gpio\_python\_code/”  2. Create file “touch 6\_user\_input\_blink.py”  3. Enter the code above code  Once complete “Ctrl + x” then “y” then “enter”  4. To run the python code “sudo python 6\_user\_input\_blink.py” << Run through the questions and make an LED blink. |