Assignment No:6

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Aim: Understanding connectivity of Rasberry Pi / Beagle board with zigbee module. Write a n/w application for communication between two devices using zigbee

Theory

- Zigbee is a communication device used for data transfer between controller Computer system really anything with a serial port
- As it works with low power consumption, transmission distances is limited to 10-100 m line of sight
- zigbee device can transmit data over long distances by passing data through mesh N/w of intermediate devices to reach more distant ones
- Its main app are in field of wireless sensor N/w based on industries as it requires short range low rate wireless data transfer
- Here we make of zigbee with Raspberry wireless communication got 4 USB port so it zigbee dongle for this want to check both 2 parallel use at an interface pi2 for a proper Raspberry Pi has is better to use interface

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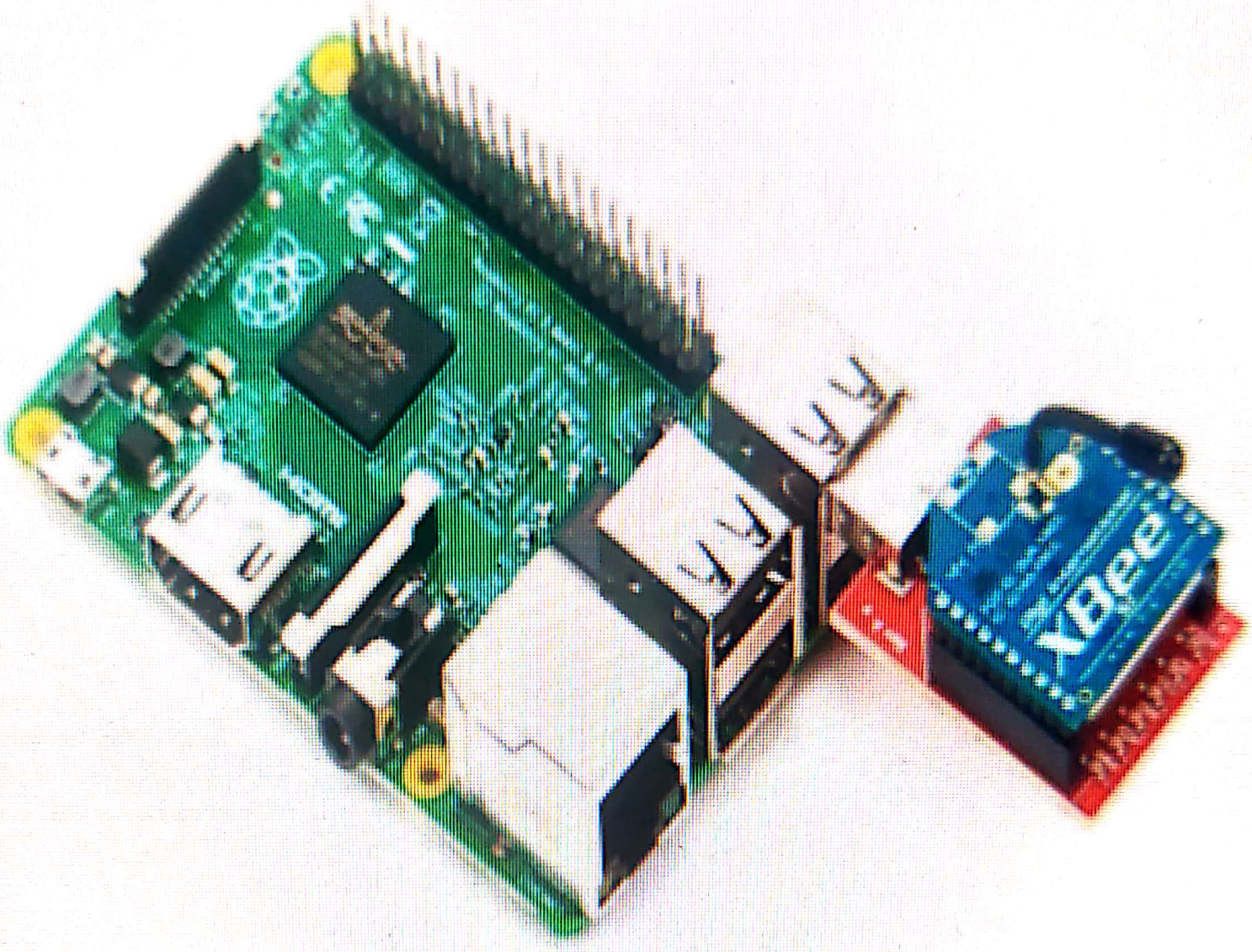

Python script to perform zigbee communication

```
Import serial
# Enable USB communication
ser = serial.serial ('/dev/HyUSB0', 9600,
                     TIMEOUT = 5)
while True
    ser.write("Hello user\r\n") # write
                                a Data
    incoming = ser.readline().strip()
    print('Received Data:' + incoming
```

Conclusion

Thus we have done zigbee communication between two Rasberry Pi devices.