Internet of Things: Prelab

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Aufgabe 1:

Jaysun: score 6/10 Ole: score 8/10

Aufgabe 2:

Both are areas of the memory but they are different in that the stack is used for managing local variables and function calls, its limited in size and is memory allocation and deallocation is handled automatically. The heap in contrast is typically larger and is explicitly handled by the programmer.

Stack overflow results in a runtime error or crash. The behavior following a stack overflow varies depending on the platform and operation system in use.

Aufgabe 3:

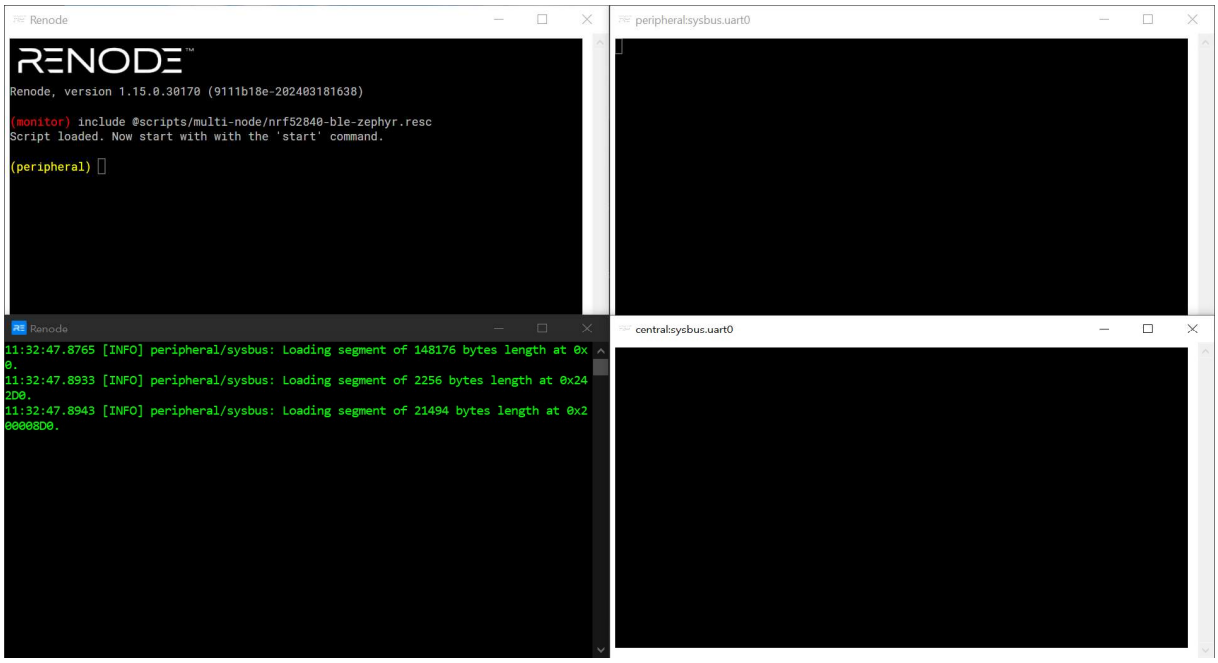
Static makes the following either function or variable inaccessible by other files and if used with a variable it retains its value between function calls.

Aufgabe 4:

For K/16 we would have to use a bit right shift by 4: K >> 4

For K%16 we would have to use a B = K >> 4 and then a bitwise AND with B&K.

Aufgabe 5:



Question 6

A BLE environment is set up using the command

```
emulation CreateBLEMedium "wireless"
```

and then the scanner and advertiser are connected to the ble simulation via

```
connector Connect sysbus.radio wireless
```

Question 7

The advertiser sets up a BLE beacon and then starts it.

The scanner defines a method to start the observer and handling a found device, and then starts a BLE beacon without any advertisement.

Question 8