**Calculating flush rate for storage :-**

Given, No. of Channels ( for sample collection) 🡪 4

No. of samples/channel sec 🡪 25000

Size for one sample 🡪 32 bits

Thus, Total samples / sec = 4 × 25000

= 100000 samples/sec

Total bits required / sec = 100000 × 32

= 3200000 bits/sec

Total bytes / sec = 3200000 ÷ 8

= 400000 bytes / sec

i.e. we will be having **400000 bytes of data per sec getting stored**

If we take **32 GB SD card**, and out of it let’s **take 24 GB is taken for sample data storage**,

Then,

Flush rate = 24000000000 ÷ 400000

**= 60000 sec**

= 60000 ÷ 60

**= 1000 minutes**

= 1000 ÷ 60

**≈ 16.67 hrs**

i.e. **The flush rate for the storage will be nearly after each 16.67 hrs.**

**Action** :- You will be getting 3 streams of input parallel from 3 channels at rate of approximately 10k or 12k samples per second.

**Workflow** :- 1. Acquisition of data

2. Filtering out unnecessary data input

3. After filtering compress the good data

4. uplink the good data for storage

