FREE COMMAND

free command which displays the total amount of free space available along with the amount of memory used and swap memory in the system, and also the buffers used by the kernel.

Using free Command

```
[root@vivek ~]# free
             total        used        free      shared  buff/cache   available
Mem:       1843832      308332     1205404       17524      330096     1363756
Swap:      2097148           0     2097148
```

where column:

1. total displays the total installed memory (MemTotal and SwapTotal i.e present in /proc/meminfo).
2. used displays the used memory.
3. free displays the unused memory.
4. shared displays the memory used by tmpfs (Shmen i.epresent in /proc/meminfo and displays zero in case not available).
5. buffers display the memory used by kernel buffers.
6. cached displays the memory used by the page cache and slabs (Cached and Slab available in /proc/meminfo).
7. buffers/cache displays the sum of buffers and cache.

Using -b: It just displays the output in unit bytes

```
[root@vivek ~]# free -b
             total        used        free      shared  buff/cache   available
Mem:    1888083968   315707392  1234333696    17944576   338042880  1396510720
Swap:   2147479552           0  2147479552
```

Using -k: This option displays the result in kilobytes

```
[root@vivek ~]# free -k
             total        used        free      shared  buff/cache   available
Mem:       1843832      310136     1203228       17524      330468     1361916
Swap:      2097148           0     2097148
```

Using -m: This option displays the result in megabytes

```
[root@vivek ~]# free -m
             total        used        free      shared  buff/cache   available
Mem:          1800         302        1175          17         322        1330
Swap:         2047           0        2047
```

using -g: This option displays the result in gigabytes

```
[root@vivek ~]# free -g
             total        used        free      shared  buff/cache   available
Mem:             1           0           1           0           0           1
Swap:            1           0           1
```

Using -t (total): This option displays an additional line containing the total of the total

```
[root@vivek ~]# free -t
             total        used        free      shared  buff/cache   available
Mem:       1843832      308980     1204376       17524      330476     1363072
Swap:      2097148           0     2097148
Total:     3940980      308980     3301524
```

  C R E A T E D B Y : - V I V E K G A N D H I

FREE COMMAND

Using -s and -o: This option allows you to display the output of free command after a set time gap given by the user

```
[root@vivek ~]# free -s 2 -c 3
              total        used        free      shared  buff/cache   available
Mem:        1843832      307864     1203656       17524      332312     1364168
Swap:       2097148           0     2097148

              total        used        free      shared  buff/cache   available
Mem:        1843832      307864     1203656       17524      332312     1364168
Swap:       2097148           0     2097148

              total        used        free      shared  buff/cache   available
Mem:        1843832      307832     1203688       17524      332312     1364200
Swap:       2097148           0     2097148
```

It displays version info and exit.

```
[root@vivek ~]# free -V
free from procps-ng 3.3.15
```