

# LAB EXAM

ROLL NO-12340740

Question 1

output:-

```
SeaBIOS (version 1.16.3-debian-1.16.3-2)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1EFCB050+1EF0B050 CA00

Booting from Hard Disk...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap star
t 58
init: starting sh
12340740_FARHAN$
```

Question 2

```
SeaBIOS (version 1.16.3-debian-1.16.3-2)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1EFCB050+1EF0B050 CA00

Booting from Hard Disk...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap star
t 58
init: starting sh
12340740_FARHAN$ testtoupper
Before: Write Your FULL Name Here
After: WRITE YOUR FULL NAME HERE
```

Question 3

## Question 4)

```
t 58
init: starting sh
12340740_FARHAN$ faulttest
Page faults : 2
Page faults afte : 6
12340740_FARHAN$ _
```

## Question 5)

```
Every 2.0s: pmap -x 394667
```

```
394667: ./a.out
Address      Kbytes    RSS    Dirty Mode  Mapping
00005e5d886b8000      4         4      0 r---- a.out
00005e5d886b9000      4         4      0 r-x-- a.out
00005e5d886ba000      4         4      0 r---- a.out
00005e5d886bb000      4         4      4 r---- a.out
00005e5d886bc000      4         4      4 rw--- a.out
00005e5dbb0fd000    132         8      8 rw--- [ anon ]
0000701ac7600000    160        156      0 r---- libc.so.6
0000701ac7628000   1568        976      0 r-x-- libc.so.6
0000701ac77b0000    316         64      0 r---- libc.so.6
0000701ac77ff000     16         16     16 r---- libc.so.6
0000701ac7803000      8          8      8 rw--- libc.so.6
0000701ac7805000    52         20     20 rw--- [ anon ]
0000701ac7954000    12          8      8 rw--- [ anon ]
0000701ac7972000      8          4      4 rw--- [ anon ]
0000701ac7974000      8          0      0 r---- [ anon ]
0000701ac7976000      8          0      0 r---- [ anon ]
0000701ac7978000      8          4      0 r-x-- [ anon ]
0000701ac797a000      4          4      0 r---- ld-linux-x86-64.so.2
0000701ac797b000    172        172      0 r-x-- ld-linux-x86-64.so.2
0000701ac79a6000    40         40      0 r---- ld-linux-x86-64.so.2
0000701ac79b0000      8          8      8 r---- ld-linux-x86-64.so.2
0000701ac79b2000      8          8      8 rw--- ld-linux-x86-64.so.2
00007fffad7e9000   136         20     20 rw--- [ stack ]
ffffffffff600000      4          0      0 --x-- [ anon ]
-----
total kB          2688    1536    108
```

## Question 6)

```
Starting FIFO page replacement simulation...
Access page 1: MISS, replacing page -1
Access page 2: MISS, replacing page -1
Access page 3: MISS, replacing page -1
Access page 4: MISS, replacing page 1
Access page 1: MISS, replacing page 2
Access page 2: MISS, replacing page 3
Access page 5: MISS, replacing page 4
Access page 1: HIT
Access page 2: HIT
Access page 3: MISS, replacing page 1
Access page 4: MISS, replacing page 2
Access page 5: HIT
Access page 0: MISS, replacing page 5
Access page 0: HIT
Access page 0: HIT
FDR SIZE 3
FIFO simulation completed.
Total hits: 5
Total misses: 10
Starting FIFO page replacement simulation...
Access page 1: MISS, replacing page -1
Access page 2: MISS, replacing page -1
Access page 3: MISS, replacing page -1
Access page 4: MISS, replacing page -1
Access page 1: HIT
Access page 2: HIT
Access page 5: MISS, replacing page 1
Access page 1: MISS, replacing page 2
Access page 2: MISS, replacing page 3
Access page 3: MISS, replacing page 4
Access page 4: MISS, replacing page 5
Access page 5: MISS, replacing page 1
Access page 0: MISS, replacing page 2
Access page 0: HIT
Access page 0: HIT
FDR SIZE 4
FIFO simulation completed.
Total hits: 4
Total misses: 11
12340740_FARHAN$
```