

Name: Aaditya Ganesh Sutar

Form No: 240612558

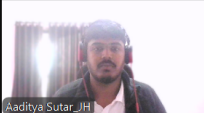
Centre: JUHU

Section 1:

Question 1:

O/P:

```
cdac@Enma: //home/cdac/pr  X + v
etc  lib32  media      root  srv  var
cdac@Enma: // $ cd home
cdac@Enma: //home $ ls
ace123  ace23  cdac
cdac@Enma: //home $ cd cdac
cdac@Enma: //home/cdac $ mkdir project
cdac@Enma: //home/cdac $ cd project
cdac@Enma: //home/cdac/project $ nano access.log
cdac@Enma: //home/cdac/project $ head access.log
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
cdac@Enma: //home/cdac/project $
```



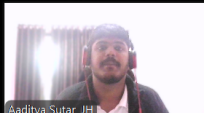
You are screen sharing 00:34:12 Stop share

26° ENG IN 11:05 02-09-2024

Question 2:

O/P:

```
cdac@Enma: //home/cdac/pr  X + v
cdac@Enma: //home/cdac $ mkdir project
cdac@Enma: //home/cdac $ cd project
cdac@Enma: //home/cdac/project $ nano access.log
cdac@Enma: //home/cdac/project $ head access.log
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
cdac@Enma: //home/cdac/project $ sort -u access.log > sorted_access.log
cdac@Enma: //home/cdac/project $ ls
access.log  sorted_access.log
cdac@Enma: //home/cdac/project $ nano sorted_access.log
cdac@Enma: //home/cdac/project $ cat sorted_access.log
cat: sorted_access.log: No such file or directory
cdac@Enma: //home/cdac/project $ cat sorted_access.log
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project $
```



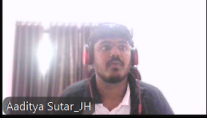
You are screen sharing 00:39:34 Stop share

26° ENG IN 11:10 02-09-2024

Question 3:

O/P:

```
cdac@Enma: //home/cdac/pr X + v
cdac@Enma: //home/cdac/project$ ls
access.log sorted_access.log
cdac@Enma: //home/cdac/project$ sort sorted_access.log | uniq > unique_ips.txt
cdac@Enma: //home/cdac/project$ ls
access.log sorted_access.log unique_ips.txt
cdac@Enma: //home/cdac/project$ nano unique_ips.txt
cdac@Enma: //home/cdac/project$ cat unique_ips.txt
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$
```




You are screen sharing 00:44:01 Stop share

26° ENG IN 11:15 02-09-2024

Question 4:

O/P:

```
cdac@Enma: //home/cdac/pr X + v
cdac@Enma: //home/cdac/project$ ls
access.log sorted_access.log
cdac@Enma: //home/cdac/project$ sort sorted_access.log | uniq > unique_ips.txt
cdac@Enma: //home/cdac/project$ ls
access.log sorted_access.log unique_ips.txt
cdac@Enma: //home/cdac/project$ nano unique_ips.txt
cdac@Enma: //home/cdac/project$ cat unique_ips.txt
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ uniq -c unique_ips.txt
  1 192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
  1 192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
  1 192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
  1 192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
  1 192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
  1 192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
  1 192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
  1 192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
  1 192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$
```



You are screen sharing 00:46:05 Stop share

26° ENG IN 11:17 02-09-2024

Question 5:

O/P:

```
cdac@Enma: //home/cdac/pr x + v
cdac@Enma: //home/cdac/project$ nano unique_ips.txt
cdac@Enma: //home/cdac/project$ cat unique_ips.txt
192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ uniq -c unique_ips.txt
  1 192.168.1.10 - - [28/Aug/2024:10:00:01] "GET /index.html HTTP/1.1" 200 1024
  1 192.168.1.11 - - [28/Aug/2024:10:01:15] "POST /login.php HTTP/1.1" 200 2048
  1 192.168.1.12 - - [28/Aug/2024:10:02:23] "GET /home.html HTTP/1.1" 200 1536
  1 192.168.1.13 - - [28/Aug/2024:10:03:42] "GET /about.html HTTP/1.1" 404 512
  1 192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
  1 192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
  1 192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
  1 192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
  1 192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ tail -5 sorted_access.log | recent_access.log
recent_access.log: command not found
cdac@Enma: //home/cdac/project$ tail -5 sorted_access.log > recent_access.log
cdac@Enma: //home/cdac/project$ cat recent_access.log
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$
```

Question 6:

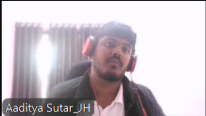
O/P:

```
cdac@Enma: //home/cdac/pr x + v
cdac@Enma: //home/cdac/project$ ls
access.log  recent_access.log  sorted_access.log  unique_ips.txt
cdac@Enma: //home/cdac/project$ grep "error" recent_access.log > errors.log
cdac@Enma: //home/cdac/project$ ls
access.log  errors.log  recent_access.log  sorted_access.log  unique_ips.txt
cdac@Enma: //home/cdac/project$ cat errors.log
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ cat recent_access.log
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$
```

Question 7:

O/P:


```
cdac@Enma: //home/cdac/pr x + v
cdac@Enma: //home/cdac/project$ ls
access.log  recent_access.log  sorted_access.log  unique_ips.txt
cdac@Enma: //home/cdac/project$ grep "error" recent_access.log > errors.log
cdac@Enma: //home/cdac/project$ ls
access.log  errors.log  recent_access.log  sorted_access.log  unique_ips.txt
cdac@Enma: //home/cdac/project$ cat errors.log
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ cat recent_access.log
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ head -5 errors.log
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$
```



Question 8:

O/P:

```
cdac@Enma: //home/cdac/pr x + v
access.log  recent_access.log  sorted_access.log  unique_ips.txt
cdac@Enma: //home/cdac/project$ grep "error" recent_access.log > errors.log
cdac@Enma: //home/cdac/project$ ls
access.log  errors.log  recent_access.log  sorted_access.log  unique_ips.txt
cdac@Enma: //home/cdac/project$ cat errors.log
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ cat recent_access.log
192.168.1.15 - - [28/Aug/2024:10:05:30] "POST /submit.php HTTP/1.1" 500 2048
192.168.1.16 - - [28/Aug/2024:10:06:11] "GET /contact.html HTTP/1.1" 200 768
192.168.1.18 - - [28/Aug/2024:10:08:12] "GET /index.html HTTP/1.1" 403 1024
192.168.1.19 - - [28/Aug/2024:10:09:27] "GET /index.html HTTP/1.1" 200 1024
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ head -5 errors.log
192.168.1.20 - - [28/Aug/2024:10:10:33] "GET /error.html HTTP/1.1" 404 512
cdac@Enma: //home/cdac/project$ chmod +a rw error.log
chmod: invalid mode: '+a'
Try 'chmod --help' for more information.
cdac@Enma: //home/cdac/project$ chmod a +rw error.log
chmod: invalid mode: 'a'
Try 'chmod --help' for more information.
cdac@Enma: //home/cdac/project$ chmod a+rw error.log
chmod: cannot access 'error.log': No such file or directory
cdac@Enma: //home/cdac/project$ chmod a+rw errors.log
cdac@Enma: //home/cdac/project$ ls -l
total 20
-rw-r--r-- 1 cdac cdac 924 Sep  2 11:04 access.log
-rw-rw-rw- 1 cdac cdac 76 Sep  2 11:24 errors.log
-rw-r--r-- 1 cdac cdac 386 Sep  2 11:19 recent_access.log
-rw-r--r-- 1 cdac cdac 692 Sep  2 11:09 sorted_access.log
-rw-r--r-- 1 cdac cdac 692 Sep  2 11:14 unique_ips.txt
cdac@Enma: //home/cdac/project$
```



Question 9:

O/P:

Question 10:

Section 2:


Question 1:

>> Script:

```
cdac@Enma: ~/project
GNU nano 6.2 even_odd_sum.sh
#!/bin/bash
echo -e "Enter the first integer: \c"
read n1
echo -e "Enter the second integer: \c"
read n2

sum=$((n1+n2))

if [[ $sum%2 -eq 0 ]]; then
echo "Sum: $sum"
echo "The sum is even."
else
echo "Sum: $sum"
echo "The sum is odd."
fi
```



Help Exit Write Out Read File Where Is Replace Read 16 lines Cut Paste Execute Location M-U Undo Redo

You are screen sharing 00:26:34 Stop share


NIFTY +0.24%

26°C Light rain

12:28 02-09-2024

>> O/P:

```
cdac@Enma: ~/project
cdac@Enma:~/project$ nano
cdac@Enma:~/project$ nano armstrong.sh
cdac@Enma:~/project$ bash armstrong.sh
Enter a three digit number: 153
153 is Not an Armstrong Number
cdac@Enma:~/project$ bash armstrong.sh
Enter a three digit number: 123
123 is Not an Armstrong Number
cdac@Enma:~/project$ ls
access.log  backup  even_odd_sum.sh  sorted_access.log
armstrong.sh  errors.log  recent_access.log  unique_ips.txt
cdac@Enma:~/project$ bash even_odd_sum.sh
Enter the first integer: 7
Enter the second integer: 3
Sum: 10
The sum is even.
cdac@Enma:~/project$
```



You are screen sharing 00:14:57 Stop share

26°C Light rain

12:16 02-09-2024

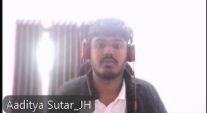
Question 2:

>>Script:

```
cdac@Enma: ~/project
GNU nano 6.2 armstrong.sh
#!/bin/bash
echo -e "Enter a three digit number: \c "
read n

digit1=$((n/100))
digit2=$((n/10%10))
digit3=$((n%10))

sum=$((digit1**3+digit2**3+digit3**3))
if [[ $sum -eq $n ]]; then
echo "$n is an Armstrong Number"
else
echo "$n is Not an Armstrong Number"
fi
```

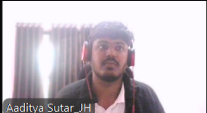


Help Exit Write Out Read File Where Is Replace Read 1.4 lines You are screen sharing 00:13:32 Stop share

26°C Light rain 12:15 02-09-2024

O/P:

```
cdac@Enma: ~/project
cdac@Enma:~/project$ nano
cdac@Enma:~/project$ nano armstrong.sh
cdac@Enma:~/project$ bash armstrong.sh
Enter a three digit number: 153
153 is Not an Armstrong Number
cdac@Enma:~/project$ bash armstrong.sh
Enter a three digit number: 123
123 is Not an Armstrong Number
cdac@Enma:~/project$
```



You are screen sharing 00:14:12 Stop share

26°C Light rain 12:15 02-09-2024