CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

For Practical Examination Only

Session: Nov-Dec 2021 Examination

Name of Examination: B.TECH., REGULAR Semester: 3rd Date: 01/04/2022

Subject Code: B022 323 (022) Subject Name: Operating System Laboratory (UNIV).

Name of Student: V Om Sai Nageshwar Sharma

Roll No. of Student: 3033 0222 0020 Enroll No: BJ4599

Name of the Institution: SSIPMT, RAIPUR Institute Code: 033

Name of Experiment Allotted ① Write the features of Linux environment, basic Linux command (echo, who, date, pwd, cd, mkdir, rmdir, ls, cp, mv, rm, cat, more, wc, find, tail, head, sort, nl, uniq, grep, egrep, pgrep, cut, past, join, tee, comm, cmp, diff, tr); also document the syntax and semantics of these commands.

② Write an 'Awk' script to count the number of lines in a file that do not contain vowels.

Signature of Student

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

Bhilai, Durg, Chhattisgarh

Admit Card for Session Nov-Dec 2021

STUDENT DETAILS			
Registration No.	BJ4599	Roll No.	303302220020
College Name	033 - SHRI SHANKARACHARYA INSTITUTE OF PROFESSIONAL MANAGEMENT & TECHNOLOGY,RAIPUR		
Student's Name	V OM SAI NAGESHWAR SHARMA		
Gender	Male	Date of Birth	17-02-2001
Father's Name	V Someshkhar Sharma	Current Semester	3 SEMESTER
Program	B Tech Computer Science Engineering	Course	B.Tech

SUBJECT DETAILS

Sl	Semester	Subject Type	Subject Code	Subject Name	Exam Session	Exam Type	ToAppear	Date & Time of Exam
1	3 SEMESTER	Sessional	B000306(046)	Personality Development	Nov-Dec 2021	Regular	Y	
2	3 SEMESTER	Theory	B000311(022)	Data structure & Algorithms	Nov-Dec 2021	Regular	Y	23/03/22 10:00 am
3	3 SEMESTER	Theory	B000312(014)	Mathematics - III	Nov-Dec 2021	Regular	Y	21/03/22 10:00 am
4	3 SEMESTER	Theory	B000313(022)	Principles of Programming Languages	Nov-Dec 2021	Regular	Y	25/03/22 10:00 am
5	3 SEMESTER	Theory	B000314(022)	Digital Electronics& Logic Design	Nov-Dec 2021	Regular	Y	28/03/22 10:00 am
6	3 SEMESTER	Theory	B000315(022)	Operating Systems	Nov-Dec 2021	Regular	Y	30/05/22 10:00 am
7	3 SEMESTER	Practical	B000321(022)	Data structure & Algorithms Laboratory	Nov-Dec 2021	Regular	Y	
8	3 SEMESTER	Practical	B000322(022)	Digital Electronics& Logic Design Laboratory	Nov-Dec 2021	Regular	Y	
9	3 SEMESTER	Practical	B000323(022)	Operating Systems Laboratory (UNIX)	Nov-Dec 2021	Regular	Y	01/04/22 10:00 am
10	3 SEMESTER	Practical	B000324(022)	Software Laboratory (Sci Lab/MATLAB)	Nov-Dec 2021	Regular	Y	

Signature should match with uploaded signature of candidate

Signature of the Candidate (while receiving)

Signature of the Principal

Signature of COE

INSTRUCTION FOR WRITTEN EXAMINATION

1. Candidates suffering from any diseases which would render their presence in the Examination Hall undesirable in the interests of other candidates will not be allowed to enter the Examination Hall. In exceptional cases the Centre Superintendent informed by a candidate in advance may make special arrangements.
2. The doors of the Examination Hall will be opened half an hour before the examination starts on the first day and 15 minutes before on other days. Candidates are required to sit on their allotted seats 5 minutes before the examination starts. Candidates arriving after the start of examination will not be admitted unless specially permitted by the Centre Superintendent. The Candidate shall not be allowed to consult any book or paper either in the Examination Hall or out-side.
3. Candidates should bring their own pens and Mathematical Instruments. Candidates should not be in possession of printed manuscripts (Other than their Admit Card), books and other documents while in the Examination Hall, Mutual consultation in the Examination Hall, bringing in Electronic equipments and other printed manuscripts from outside is forbidden.
4. Candidates are not allowed to consult any book or paper either in the Examination- Hall or out-side.
5. Candidates are not allowed to leave the hall until an hour after an examination starts. They should not leave their seats until they have submitted their answer books to an invigilator. Candidates should not be left behind on the desks. It is the duty of the candidate to see that his answer paper is received by the invigilator. No candidate will be allowed to re-enter the examination hall after once quitting it on submission of his answer paper. In case of urgent need however candidate may be permited by the senior invigilator to leave the hall temporarily and not more than once in an hour special supervision. The period of temporary absence should not exceed 3 minutes.
6. Candidates are not permitted to talk to each other in the Examination Hall. No one should receive help from or assist another in any manner.
7. Candidates should write their Regd No and Roll No on the upper page of his/her answer book. Candidates are forbidden to write their own name and Code No of his/her college on the answer book while answering the questions. Giving a false Roll No is serious offence and no answer book without the candidates Roll Number clearly written on the cover page will be examined.
8. Candidates should not, while in the examination hall write anything on the question paper or blotting papers nor should they take out of the hall any paper of her than the question paper. They should not also send the question paper for the examination outside throughout the duration of the examination.
9. If a candidate is found with any paper not connected with the examination as mentioned in 8 he shall have to surrender it to the invigilator on demand and make a written statement. If necessary refusal to surrender the material or to make a statement shall render the candidate liable to instant expulsion from the Centre of Examination.

Q1> Write the features of Linux environment, basic Linux command ~~smo~~ Semantic of those commands.

#1) touch: Create a new file or update its timestamp.

Syntax: ~~toc~~ touch [OPTION]...[FILE]

Example: Create empty files called 'file1' and 'file2'

$ touch file1 and file2.

#2) cat: Concatenate files and print to stdout.

Syntax: cat [OPTION]....[FILE]

Example: Create file1 with entered cotent.

$ cat > file1

Hello

^D

#3) ~~cp~~ cp: Copy files.

Syntax: cp [OPTION] source destination

Example: Copies the contents from file1 & file2 & contents of file1 is retained

$cp file1 file2

#4) mv : Move files or rename files

Syntax: mv [OPTION] source destination.

Example: create empty files called 'file1' and 'file2'

$ mv file1 file2.

#5) rm: Remove files and directories

Syntax: rm [OPTION]....[FILE]

Example: ~~Dete~~ Delete File 1

$ rm file1.

#6) mkdir: Make directory

Syntax: mkdir [OPTION] directory

Example: Create directory called dir1

$ mkdir 1.

#7) rmdir: Remove a directory.

Syntax: rmdir [OPTION] directory.

Example: Create empty files called 'file1' and 'file2'.

$ rmdir dir1.

#8) cd: Change directory

Syntax: cd [OPTION] directory

Example: Change working directory to dir1.

$ cd dir1.

#9) pwd: Print the present working directory.

Syntax: pwd [OPTION].

Example: Print 'dir1' if a current working directory is dir1.

$ pwd .

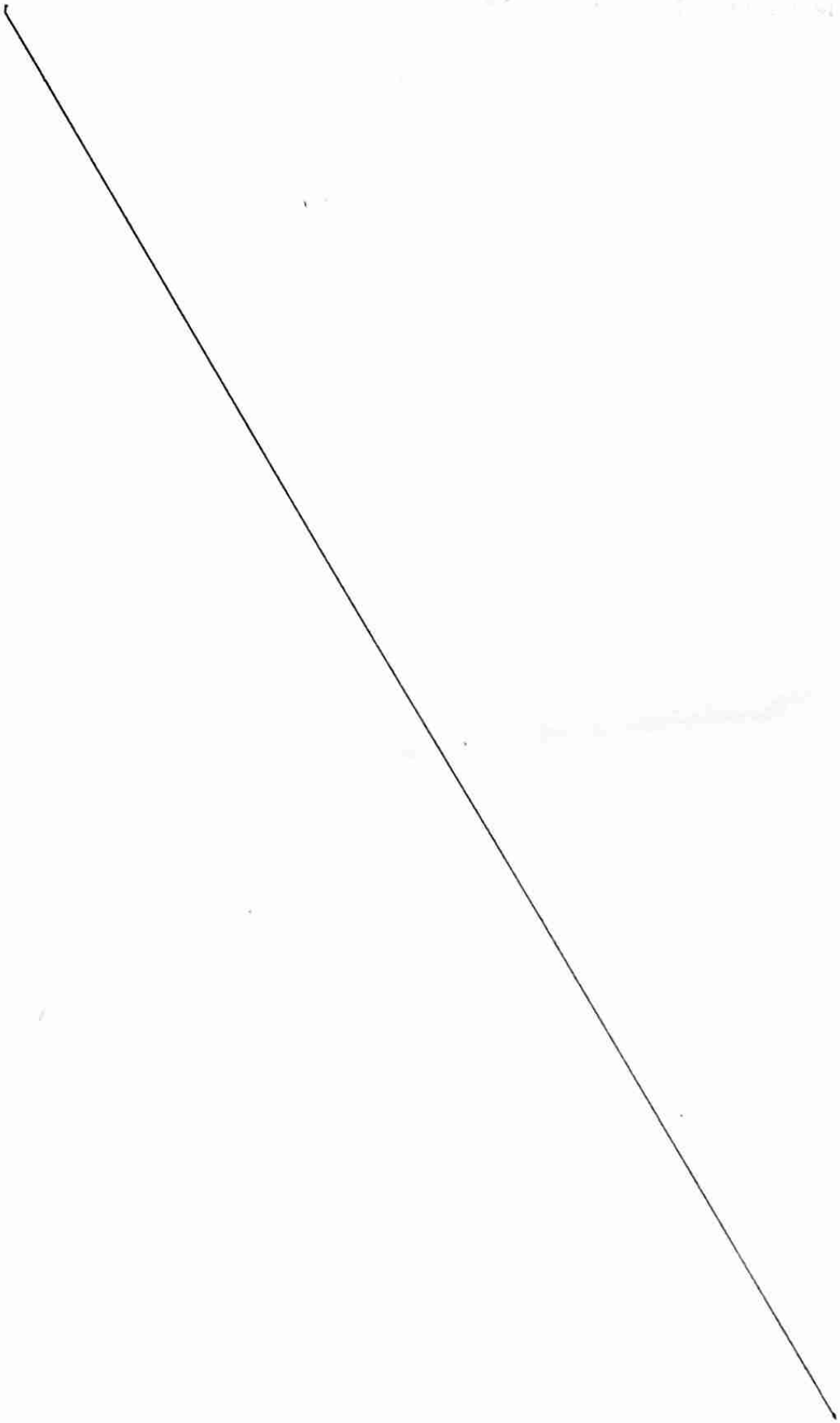
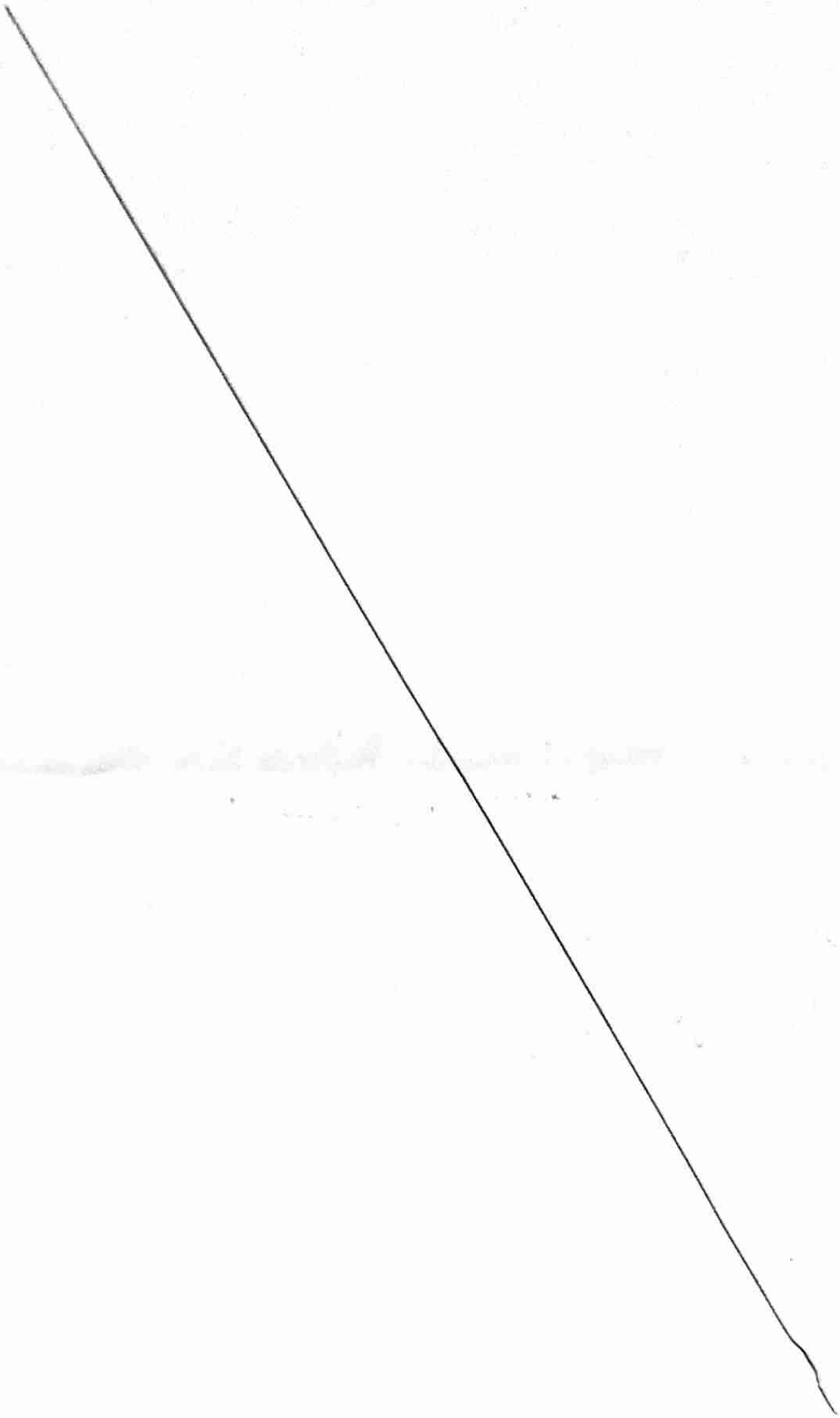
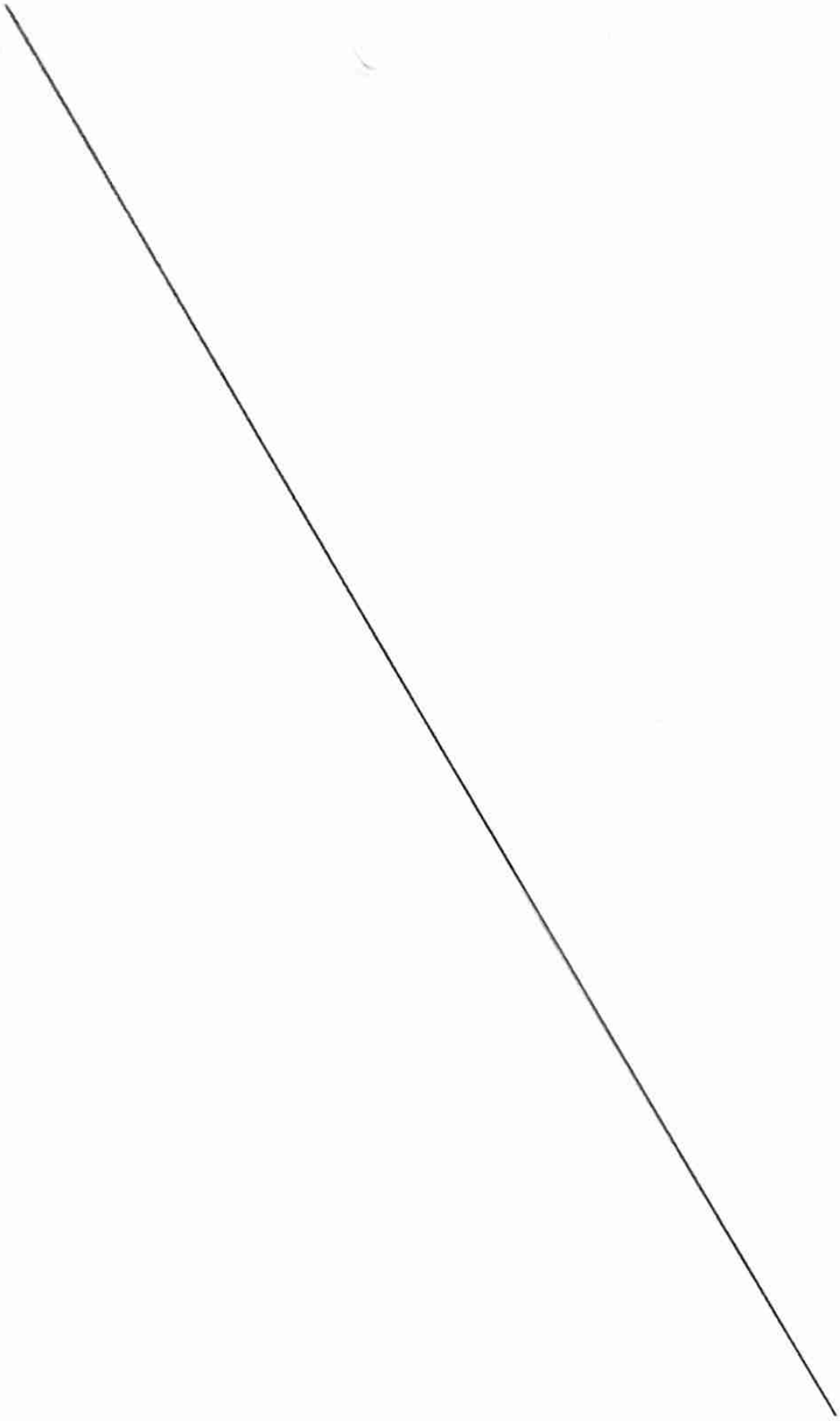
Q2> Write an 'Awk' script to count the number of lines in a file that dom not contain vowels.

```
#!/bin/bash
echo "enter file name"
read file
awk '$0!~/[aeiou]/{count++}
END{print "The number of lines
      that does not contain
      vowels are:", count}' $file
```

AWK operations:

1.) Scans a file Line by Line.
2.) Splits each inputs line into fields.
3.) Compare input line/fields to pattern.
4.) Performs action on matched lines.

Q27

Output:

```
V.Om Sai @ V.Om Sai - Virtual Box:~$ cat -n sample
     1. DBMS
     2. PYTHON
     3. JAVA
     4. SQL

V.Om Sai - Virtual Box : ~ $ ./Proj10.sh.
"Enter file name"
Sample
The number of lines that does not contain vowels are: 2
V.Om sai @ V.Om Sai - virtualbox:~$
```