Part a

1.a) awk '{print $1,$2,$5}' marks.txt | tail -6
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $1,$2,$5}'
marks.txt | tail -6
AA M 35
BB F 44
CC F 25
DD M 42
EE F 30
FF M 45

1.b) awk '{print $1,$2,$5}' marks.txt | tail -6 | head -3
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $1,$2,$5}'
marks.txt | tail -6 | head -3
AA M 35
BB F 44
CC F 25

1.c) awk '{print $1,$2,$5}' marks.txt | tail -6 | tail -1
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $1,$2,$5}'
marks.txt | tail -6 | tail -1
FF M 45

2) awk '{print $0}' marks.txt | tail -6 | awk '{ for(a=2; a<=NF; a++) sum+=$a;print
$1,sum; sum=0}'
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $0}' marks.txt |
tail -6 | awk '{ for(a=2; a<=NF; a++) sum+=$a;print $1,sum; sum=0}'
AA 70
BB 83
CC 58
DD 77
EE 70
FF 65

3.a) awk '{print $0}' marks.txt | tail -6 | awk '{ for(a=2; a<=NF; a++) sum+=$a;print
sum,$1; sum=0}' | sort | tail -1 | awk '{print $2,$1}'
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $0}' marks.txt |
tail -6 | awk '{ for(a=2; a<=NF; a++) sum+=$a;print sum,$1; sum=0}' | sort | tail -1 |
awk '{print $2,$1}'
BB 83

3.b) awk '{print $0}' marks.txt | tail -6 | awk '{ for(a=2; a<=NF; a++) sum+=$a;print
$1,sum; sum=0}' | awk '{if ($2 > 70.5) print $1,$2}'

saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $0}' marks.txt | tail -6 | awk '{ for(a=2; a<=NF; a++) sum+=$a;print $1,sum; sum=0}' | awk '{if ($2 > 70.5) print $1,$2}'
BB 83
DD 77

4) awk '{print $0}' marks.txt | tail -6 | awk '{sum1+=$3}{sum2+=$4}{count+=1}END {print sum1/count,sum2/count}'
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $0}' marks.txt | tail -6 | awk '{sum1+=$3}{sum2+=$4}{count+=1}END {print sum1/count,sum2/count}'
15.6667 18

5) awk '{print $0}' marks.txt | tail -6 | awk '{sum+=$5}{count+=1}END {print (sum/count)}'
saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '{print $0}' marks.txt | tail -6 | awk '{sum+=$5}{count+=1}END {print (sum/count)}'
36.8333

Part B

1) awk -F',' '{print $NF}' zomato.csv | awk '{sum += $1}END {print sum}'
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk -F',' '{print $NF}' zomato.csv | awk '{sum += $1}END {print sum}'
1498644

2) awk '/European, Asian, Indian/' zomato.csv
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk '/European, Asian, Indian/' zomato.csv
6300010,Spiral - Sofitel Philippine Plaza Manila,162,Pasay City,"Plaza Level, Sofitel Philippine Plaza Manila, CCP Complex, Pasay City","Sofitel Philippine Plaza Manila, Pasay City","Sofitel Philippine Plaza Manila, Pasay City, Pasay City",120.98009,14.55299,"European, Asian, Indian",6000,Botswana Pula(P),Yes,No,No,No,4,4.9,Dark Green,Excellent,621

3) awk -F',' '{if($(NF-2) == "Dark Green") print NR,$(NF-2)}' zomato.csv
OP: Too large to show

4) awk -F',' '{print $(NF-2)}' zomato.csv | sort | uniq -c
OP: saad@saad-Lenovo-ideapad-330-15ARR:~/Desktop$ awk -F',' '{print $(NF-2)}' zomato.csv | sort | uniq -c
    301 Dark Green
   1079 Green

```
3737 Orange
   1 Rating color
 186 Red
2148 White
2100 Yellow
```

5) awk -F',' '{if($(NF-1) == "Excellent") print $0}' zomato.csv
OP: Too large to show