Activity 2 – Graphs & Charts

Name: Preyash   **Date: 11/01/2022**

Registration Number: 20BPS1022

★ Prepare a questionnaire and conduct an online survey on your topic (Preferably the current situation) with minimum 50 responses. (or) Secondary date can be used.

★ Present the dataset in a Graphs & Charts include table wherever necessary.

<u>Online Learning in VIT</u>

CSV (collected responses)

	fresher	age	collegeRe	semestersOnTeams	missOffli	moreBreaks	affectingMentalHealth	technicalDifficulties	missingOpportunities	examsCodetant	2HoursEnough		M	N
1	fresher	age	collegeRe	semestersOnTeams	missOffli	moreBreaks	affectingMentalHealth	technicalDifficulties	missingOpportunities	examsCodetant	2HoursEnough			
2	No	19	Yes	more than 3 semesters	Yes	Strongly Disagree	Disagree	Rarely	Disagree	Excellent	Strongly Agree			
3	No	20	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Nice	Maybe			
4	No	21	Yes	3 semesters	Yes	Agree	Strongly Agree	Very often	Strongly Agree	Good	Maybe			
5	No	19	No	2 semesters	No	Strongly Agree	Maybe	Rarely	Maybe	Bad	Strongly Disagree			
6	No	18	No	more than 3 semesters	No	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Very bad	Strongly Disagree			
7	No	18	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Bad	Maybe			
8	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Bad	Strongly Disagree			
9	Yes	19	Yes	1 semester	Yes	Agree	Maybe	Very often	Strongly Agree	Nice	Maybe			
10	No	17	No	3 semesters	No	Strongly Agree	Agree	Rarely	Agree	Very bad	Strongly Disagree			
11	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Maybe			
12	Yes	18	No	1 semester	No	Strongly Agree	Strongly Agree	Rarely	Agree	Very bad	Maybe			
13	No	19	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Agree	Nice	Agree			
14	No	21	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Good	Strongly Agree			
15	No	20	Yes	2 semesters	Yes	Maybe	Strongly Agree	Very often	Strongly Agree	Bad	Disagree			
16	Yes	18	Yes	2 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Nice	Disagree			
17	Yes	19	Yes	1 semester	Yes	Maybe	Agree	Rarely	Strongly Agree	Nice	Maybe			
18	Yes	21	Yes	1 semester	No	Strongly Agree	Agree	Very often	Agree	Good	Maybe			
19	No	20	No	3 semesters	No	Strongly Agree	Maybe	Very often	Maybe	Nice	Disagree			
20	No	19	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Agree	Nice	Maybe			
21	No	21	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Nice	Maybe			
22	No	19	Yes	3 semesters	Yes	Strongly Disagree	Strongly Agree	Very often	Strongly Agree	Very bad	Strongly Disagree			
23	Yes	19	Yes	3 semesters	No	Agree	Strongly Agree	Very often	Strongly Agree	Good	Agree			
24	No	19	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Agree	Bad	Disagree			
25	No	18	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Bad	Disagree			
26	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Disagree			
27	No	20	Yes	more than 3 semesters	Yes	Strongly Agree	Agree	Rarely	Strongly Agree	Bad	Strongly Disagree			
28	No	19	Yes	2 semesters	Yes	Strongly Agree	Maybe	Rarely	Maybe	Nice	Maybe			
29	No	20	Yes	3 semesters	Yes	Agree	Strongly Agree	Very often	Strongly Agree	Nice	Disagree			
30	No	18	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Agree	Good	Strongly Disagree			
31	No	19	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Bad	Disagree			
32	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Agree	Very often	Agree	Nice	Agree			
33	No	19	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Nice	Agree			
34	No	20	Yes	more than 3 semesters	Yes	Strongly Agree	Maybe	Rarely	Agree	Bad	Maybe			
35	Yes	21	No	1 semester	No	Strongly Agree	Maybe	Rarely	Maybe	Very bad	Strongly Disagree			
36	Yes	19	Yes	1 semester	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Bad	Disagree			
37	No	20	Yes	2 semesters	Yes	Strongly Agree	Maybe	Rarely	Agree	Nice	Agree			

	A	B	C	D	E	F	G	H	I	J	K	L
39	Yes	19	Yes	1 semester	No	Agree	Maybe	Rarely	Agree	Nice	Agree	
40	Yes	18	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Good	Disagree	
41	Yes	18	No	2 semesters	No	Disagree	Maybe	Very often	Disagree	Excellent	Agree	
42	Yes	18	Yes	1 semester	Yes	Strongly Agree	Disagree	Rarely	Agree	Bad	Disagree	
43	No	19	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Good	Maybe	
44	No	17	Yes	more than 3 semesters	Yes	Agree	Strongly Agree	Very often	Strongly Agree	Bad	Maybe	
45	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Disagree	
46	No	18	Yes	more than 3 semesters	Yes	Agree	Maybe	Very often	Maybe	Bad	Agree	
47	No	19	Yes	more than 3 semesters	Yes	Strongly Agree	Maybe	Very often	Disagree	Nice	Maybe	
48	No	21	No	3 semesters	No	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Strongly Disagree	
49	No	20	Yes	more than 3 semesters	Yes	Strongly Agree	Agree	Very often	Strongly Agree	Nice	Disagree	
50	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Very bad	Strongly Disagree	
51	No	19	Yes	3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Good	Disagree	
52	No	21	Yes	3 semesters	Yes	Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Disagree	
53	No	20	No	3 semesters	No	Strongly Agree	Maybe	Very often	Agree	Bad	Disagree	
54	No	19	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Bad	Agree	
55	No	21	Yes	more than 3 semesters	Yes	Strongly Disagree	Strongly Disagree	Very often	Strongly Disagree	Very bad	Strongly Disagree	
56	No	19	No	3 semesters	No	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Strongly Disagree	
57	No	19	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Nice	Maybe	
58	No	20	Yes	more than 3 semesters	No	Strongly Agree	Maybe	Rarely	Agree	Good	Disagree	
59	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Strongly Disagree	
60	Yes	19	Yes	1 semester	Yes	Agree	Strongly Disagree	Rarely	Maybe	Nice	Disagree	
61	No	18	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Strongly Disagree	
62	No	19	Yes	3 semesters	Yes	Strongly Agree	Agree	Rarely	Maybe	Nice	Disagree	
63	No	20	No	more than 3 semesters	No	Strongly Agree	Maybe	Rarely	Agree	Nice	Agree	
64	No	21	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Rarely	Strongly Agree	Bad	Disagree	
65	Yes	19	Yes	1 semester	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Very bad	Strongly Disagree	
66	Yes	18	No	1 semester	No	Strongly Agree	Maybe	Rarely	Maybe	Bad	Disagree	
67	Yes	19	Yes	1 semester	Yes	Maybe	Disagree	Very often	Maybe	Bad	Maybe	
68	No	20	Yes	more than 3 semesters	Yes	Strongly Agree	Strongly Agree	Very often	Strongly Agree	Good	Strongly Agree	
69	Yes	20	Yes	1 semester	Yes	Strongly Agree	Agree	Very often	Agree	Nice	Maybe	

onlineLearning ⊕

Importing the CSV

Import Dataset

Name: onlineLearning

Encoding: Automatic
Heading: ● Yes ○ No
Row names: Automatic
Separator: Comma
Decimal: Period
Quote: Double quote (")
Comment: None
na.strings: NA
☐ Strings as factors

Input File

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fresher,age,collegeReopen,semestersOnTeams,missOffline,morel
No,19,Yes,more than 3 semesters,Yes,Strongly Disagree,Disag
No,20,Yes,3 semesters,Yes,Strongly Agree,Strongly Agree,Very
No,21,Yes,3 semesters,Yes,Agree,Strongly Agree,Very often,S
No,19,No,2 semesters,No,Strongly Agree,Maybe,Rarely,Maybe,B
No,18,No,more than 3 semesters,No,Strongly Agree,Strongly A
No,18,Yes,3 semesters,Yes,Strongly Agree,Strongly Agree,Rar
No,18,Yes,more than 3 semesters,Yes,Strongly Agree,Strongly
Yes,19,Yes,1 semester,Yes,Agree,Maybe,Very often,Strongly A
No,17,No,3 semesters,No,Strongly Agree,Agree,Rarely,Agree,V
No,18,Yes,more than 3 semesters,Yes,Strongly Agree,Strongly
Yes,18,No,1 semester,No,Strongly Agree,Strongly Agree,Rarel
No,19,Yes,3 semesters,Yes,Strongly Agree,Strongly Agree,Rar
No,21,Yes,more than 3 semesters,Yes,Strongly Agree,Strongly
No,20,Yes,2 semesters,Yes,Maybe,Strongly Agree,Very often,S
Yes,18,Yes,2 semesters,Yes,Strongly Agree,Strongly Agree,Ve
Yes,19,Yes,1 semester,Yes,Maybe,Agree,Rarely,Strongly Agree
Yes,21,Yes,1 semester,No,Strongly Agree,Agree,Very often,Ag
```

**Data Frame**

fresher	age	collegeReopen	semestersOnTeams	missO
No	19	Yes	more than 3 semesters	Yes
No	20	Yes	3 semesters	Yes
No	21	Yes	3 semesters	Yes
No	19	No	2 semesters	No
No	18	No	more than 3 semesters	No
No	18	Yes	3 semesters	Yes
No	18	Yes	more than 3 semesters	Yes
Yes	19	Yes	1 semester	Yes
No	17	No	3 semesters	No
No	18	Yes	more than 3 semesters	Yes
Yes	18	No	1 semester	No
No	19	Yes	3 semesters	Yes
No	21	Yes	more than 3 semesters	Yes
No	20	Yes	2 semesters	Yes
Yes	18	Yes	2 semesters	Yes
Yes	19	Yes	1 semester	Yes
Yes	21	Yes	1 semester	No

Import   Cancel

Q1.) What is your age?

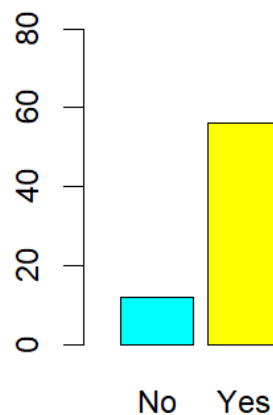plot(onlineLearning$age,type="l",main="age",xlab="responses",ylab="age in years",col="blue")
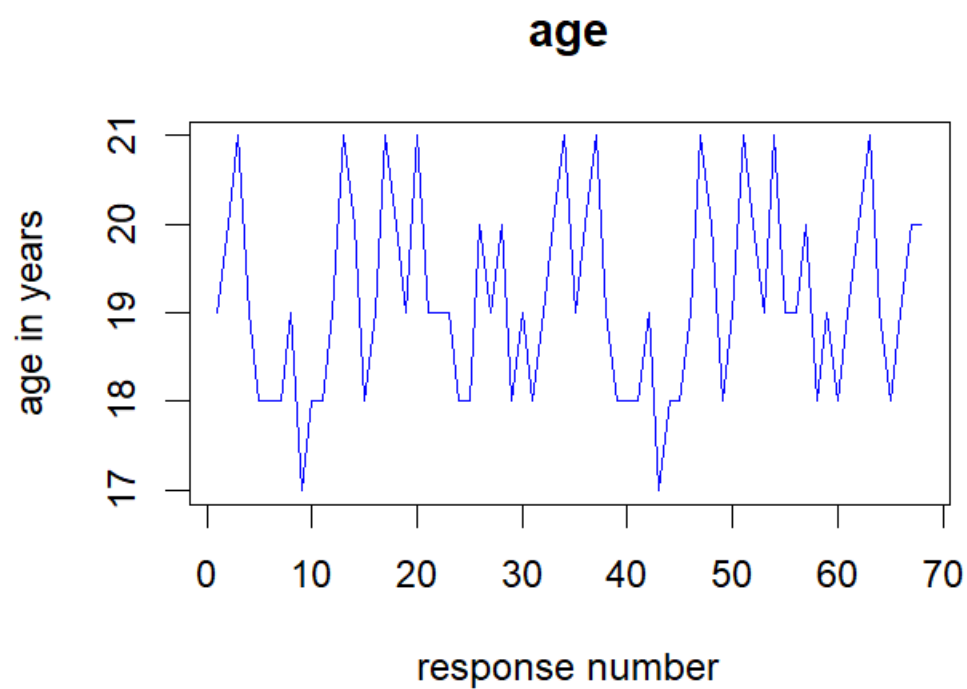
Q2.) Are you a fresher?

tableFresher=table(onlineLearning$fresher)
pie(tableFresher,col=c("blue","red"))
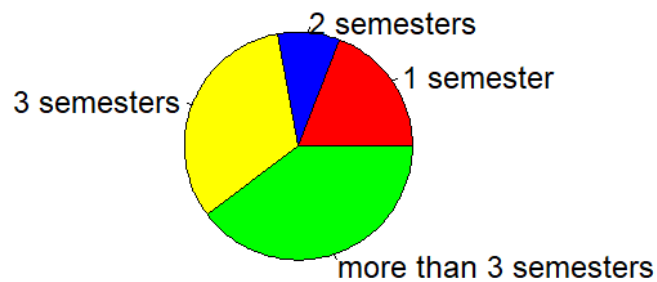

Q3.) Do you want the college to reopen?

tableReopen=table(onlineLearning$collegeReopen)

barplot(tableReopen,beside=T,xlim=c(0,8),ylim=c(0,80),col=c("cyan","yellow"))

Q4.) How many semesters have you spent on MS Teams?

tableMSteams=table(onlineLearning$semestersOnTeams)

pie(tableMSteams,col=c("red","blue","yellow","green"))

Q5.) Do you miss offline classes?

tableMiss=table(onlineLearning$missOffline)

barplot(tableMiss,beside=T,xlim=c(0,8),ylim=c(0,80),col=c("red","blue"))
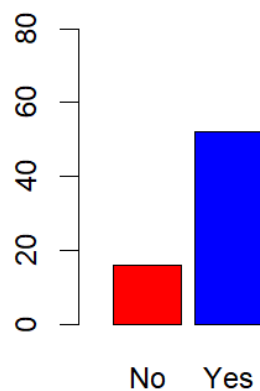
**Q6.) Do you think we should get more holidays/semester breaks?**

tableBreaks=table(onlineLearning$moreBreaks)

pie(tableBreaks,col=c("blue","red","yellow","green","pink"))
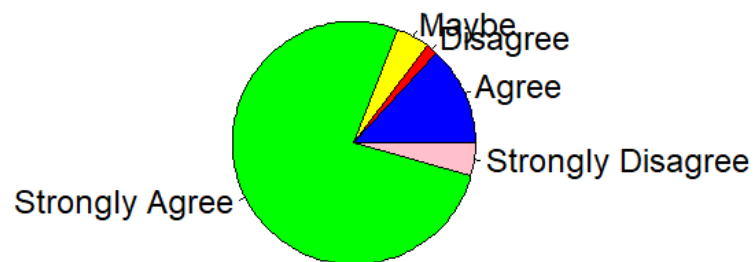
**Q7.) Do you think online classes are affecting our mental health?**

tableAffectingMentally=table(onlineLearning$affectingMentalHealth)

barplot(tableAffectingMentally,beside=T,xlim=c(0,5),ylim=c(0,50),col=c(
"red","blue","cyan","yellow","green"),ylab="No. of Responses")

legend("topright",legend=rownames(tableBreaks),fill=c('red','blue','cya
n','yellow','green'),bty="n")
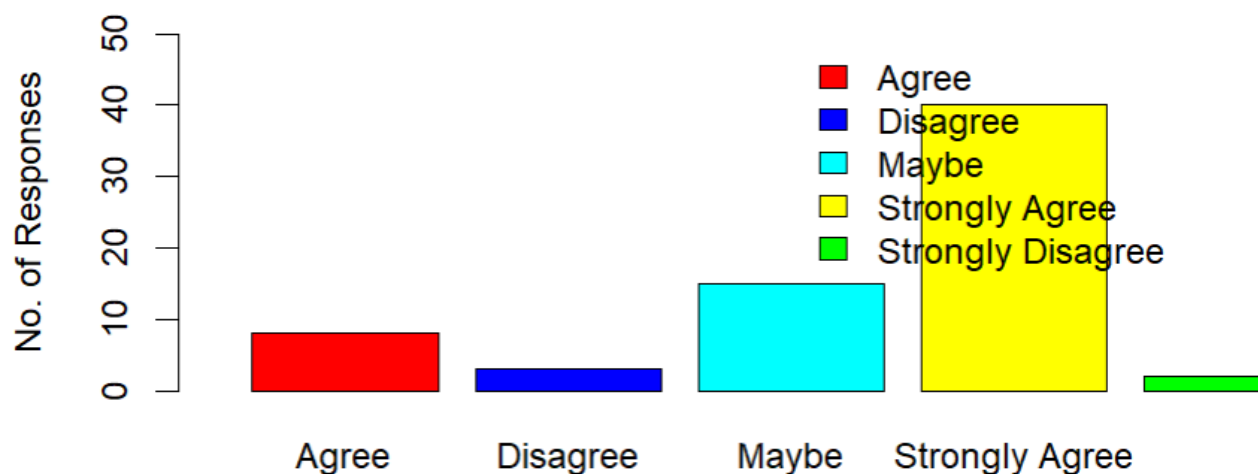
Q8.) Do you think we are missing a lot of learning opportunities because of these online classes?

tableOppo=table(onlineLearning$missingOpportunities)

pie(tableOppo,col=c("red","blue","cyan","yellow","green"),xlab="Are you missing opportunities?")
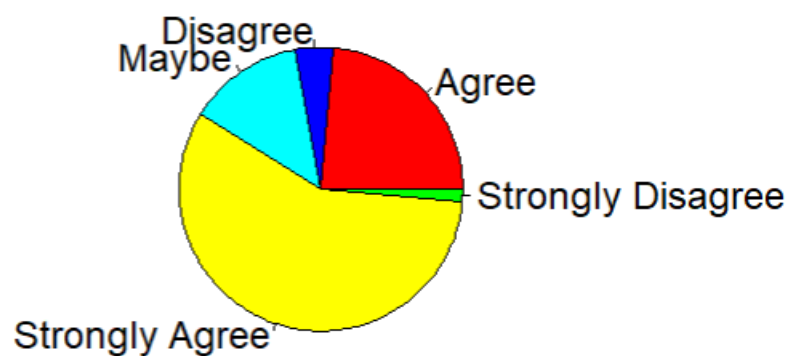
Are you missing opportunities?

Q9.) How was your experience of exams conducted on Codetantra?

tableExp=table(onlineLearning$examsCodetantra)

pie(tableExp,col=c("red","blue","cyan","yellow","green"))

Q10.) Do you think 2 hours are enough for solving the FAT questions?

boxplot(onlineLearning$age~onlineLearning$X2HoursEnough,col=c("red","blue","cyan","yellow","green"),xlab="Are 2 hours enough for FAT questions.",ylab="age")