Question 1

You are a project manager overseeing two project teams (Team X and Team Y). The project completion times for the last ten projects are measured in weeks.

Team X Completion Times: [9,11,10,12,10,11,11,10,12,10]

**Team Y Completion Times:** [8,9,10,11,12,13,14,15,16,30]

Your goal is to use the mean and/or median to analyse the central tendency of completion times for each team. Which central tendency statistics is more appropriate for each team.

Question 2

What is a linear regression model?

Question 3

We perform a regression to study the relationship between the percent of students who are chronically absent at a local secondary school.
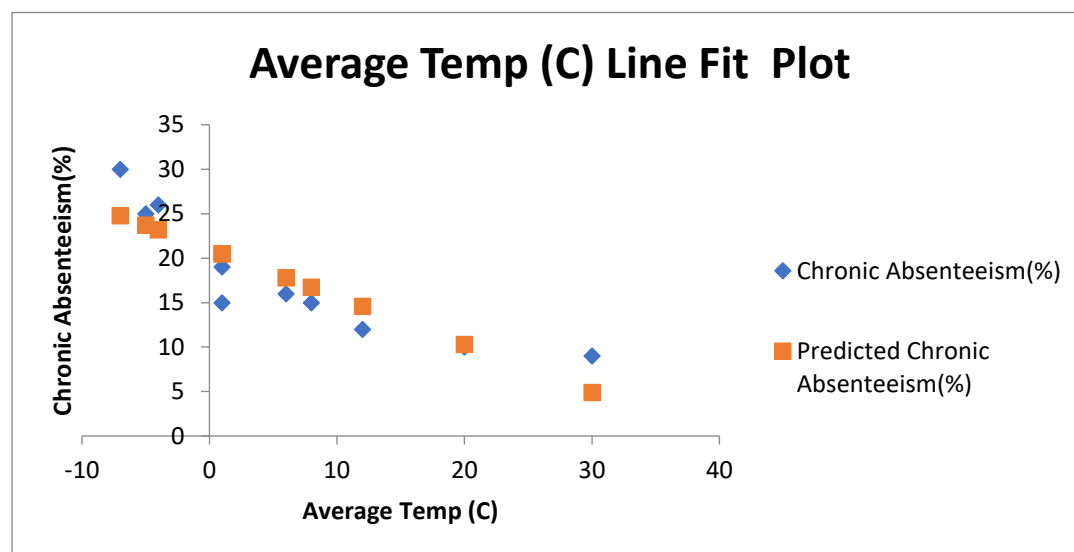

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	21.03084	1.270969	16.54709	1.8E-07	18.09998	23.9617	18.09998	23.9617
Average Temp (C)	-0.53723	0.099367	-5.40653	0.000641	-0.76637	-0.30809	-0.76637	-0.30809

a) Please interpret the regression output

b) What can you conclude about the association between monthly temperatures and students who are chronically absent? (think about alternative explanations)

Question 4:

Below, the graph for the distribution of the annualised GDP growth rate from 1993 to 2008 is given. Use any of the software tools (agena, python, or R) to model the distribution and answer the following questions.
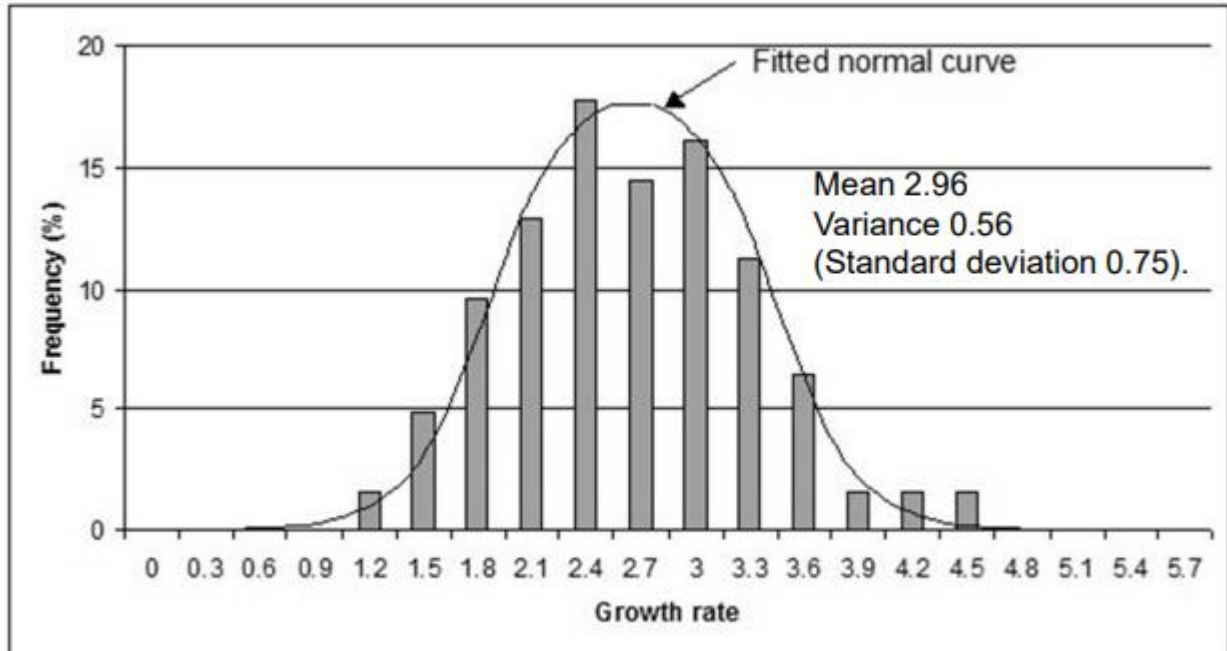
Histogram of annualised GDP growth rate from 1993-2008

a) What are the chances that next period growth rate will be between 1.5% and 3.5%?

b) What are the chances that next period growth rate will be less than 1.5%?

c) What are the chances that next period growth rate will be negative?

d) What are the chances that next period growth rate will be less than -5%?