1. Write a program to find the largest of three numbers.
2. Write a program to print the multiplication table of a number n.
3. Write a program to find Surface area and volume of a cylinder using function.
4. Write a program to replace a word by another word in a sentence.
5. Write a program to confirm the validity of an email id by verifying its format.
6. Write a program to remove every occurrence of a number from a list.
7. Write a program to add two matrices.
8. Write a program to read a tuple of numbers and print even tuple and odd tuple.
9. Create a dictionary with a set of book title and corresponding stock. Write a program to update the stock and to add or delete books.
10. A set of numbers are stored in a file. Write a program to print the prime numbers among them.
11. Write a program to count the number of words, sentences, upper case letters, lowercase letters and special symbols in a text stored in file.
12. Plot a graph y = f(x).
13. The areas of the various continents of the world (in millions of square miles) are as follows:11.7 for Africa; 10.4 for Asia; 1.9 for Europe; 9.4 for North America; 3.3 Oceania; 6.9 South America; 7.9 Soviet Union. Draw a bar chart representing the given data.
14. Draw the histogram of the following data:

Height of student(m)	135 - 140	140 - 145	145 - 150	150 - 155
No. of students	4	12	16	8

15. Table contains population and murder rates (in units of murders per 100,000 people per year) for different states. Compute the mean, median and variance for the population.

State	Population	Murder
Alabama	4,779,736	5.7
Alaska	710,231	5.6
Arizona	6,392,017	4.7
Arkansas	2,915,918	5.6
California	37,253,956	4.4
Colorado	5,029,196	2.8
Connecticut	3,574,097	2.4
Delaware	897,934	5.8

16. Calculate the S.D. and coefficient of variation (C.V.) for the following table:

Class:	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency:	5	10	20	40	30	20	10	5

17. If X is binomially distributed with 6 trials and a probability of success equal to 0.25 at each attempt, what is the probability of:

    a) exactly 4 successes   b) at least one success

18. If the random variable X follows a Poisson distribution with mean 3.4, find $P(X=6)$.

19. A random sample of 395 people were surveyed and each person was asked to report the highest education level they obtained. The data that resulted from the survey is summarized in the following table. Are gender and education level dependent at 5% level of significance?

	High School	Bachelors	Masters	Ph.D.	Total
Female	60	54	46	41	201
Male	40	44	53	57	194
Total	100	98	99	98	395

20. Calculate the correlation coefficient of the two variables shown in the table below.

Person	Hand	Height
A	17	150
B	15	154
C	19	169
D	17	172
E	21	175

21. Suppose a sample of 16 light trucks is randomly selected off the assembly line. The trucks are driven 1000 miles and the fuel mileage (MPG) of each truck is recorded. It is found that the mean MPG is 22 with a SD equal to 3. The previous model of the light truck got 20 MPG. Conduct a t- test of the null hypothesis at p = 0.05

22. The mean productivity rating for all employees at a company was 3.8 on a five-point scale last year. This year you get ratings from a representative sample of fifteen employees from the Human Research Management. Do the data from this sample provide evidence that employee productivity in the department of Human Resource Management is significantly higher than in the company as a whole? Write the null and alternative hypotheses for this problem. Use statistical analysis software to test the null hypothesis stated above.

23. Obtain the regression equation for predicting systolic blood pressure from job satisfaction with reference to the given data using statistical analysis software. If one knows that a subject in the future has a score on job satisfaction of 15, what is their systolic blood pressure predicted to be? What is the standard error of estimate?

Job Satisfaction	Systolic BP
34	124
23	128
19	157
43	133
56	116
47	125
32	147
16	167
55	110
25	156