

HIMACHAL PRADESH UNIVERSITY, SUMMER HILL, SHIMLA  
INTERNATIONAL CENTRE FOR DISTANCE EDUCATION AND OPEN LEARNING  
(COMPUTER SCIENCE DEPARTMENT)

ASSIGNMENT No:

Course:	Semester:
Name of Student:	Roll No:
Paper Code:	Paper Title:
Theory/Lab:	Date of Submission:
Session:	Batch:

Signature of Student

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**Himachal Pradesh University, Shimla**

**Assignment**

**DDS 2<sup>nd</sup> Semester    Subject: DDS-201 Statistics for Data Science**

1. Define the terms Data classification and Tabulation.
2. How do we measure Central Tendency and Variance?
3. What are Quartiles and percentiles?
4. What is Karl Pearson's Correlation coefficient?
5. Discuss about Correlation Coefficient for Bivariate Frequency Distribution .
6. What is Baye's theorem? What is it used for?
7. What is probability distribution function. Explain in detail.
8. Discuss about central limit theorem.

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**Assignment**

**DDS 2<sup>nd</sup> Semester    Subject: DDS-202 Data Warehousing and Mining**

1. Describe architecture of a typical data ware house.
2. Differentiate between ROLAP, MOLAP and HOLAP.
3. What do you mean by ER based conceptual design?
4. What are various steps in data cleaning?
5. What do you mean by Metadata? How is it useful?
6. Describe star schema in detail.
7. What do you mean by Data Mining? Explain in brief.
8. What is clustering? How is it useful?

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**Assignment**

**DDS 2<sup>nd</sup> Semester    Subject: DDS-203 Python for Data Analytics**

1. Describe about various Data Types in Python.
2. What are Dictionaries in Python? What is their use?
3. What is inheritance? How many types of inheritance is supported by Python?
4. What are Pandas in Python. Give a short explanation.
5. Briefly discuss about various visualization tools in Python.
6. What are binary files?

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**Assignment**

**DDS 2<sup>nd</sup> Semester    Subject: DDS-204 R for Data Analytics**

1. Define Data types. What are various data types in R language?
2. What are vectors in R? Explain their use with examples.
3. What are Lists in R? How are they different for Vectors? Explain with examples.
4. Discuss about operators in R.
5. Discuss about decision control structures in R.
6. Briefly explain about Arrays in R
7. What are R packages? What are they used for?
8. Why is R called a statistics programming language
9. List important features of R.
10. What are strings in R? How are they manipulated?

Dr. Sandeep Kumar,

Assistant Professor (Computer Science)

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**Assignment**

**DDS 2<sup>nd</sup> Semester    Subject: DDS-251 Python for Data Analytics Lab-III**

1. Write a program to swap two numbers.
2. Write a Program to perform basic calculator operations.
3. Write a Program to illustrate common string operations in python.
4. Write a Program to print prime numbers.
5. Write a Program by using Tuple in Python.
6. Write a Program to explain different types of loop control statements.
7. Write a Program to show use of five dictionary functions.

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**Assignment**

**DDS 2<sup>nd</sup> Semester    Subject: DDS-252 R for Data Analytics Lab-IV**

1. Write a program for Matrix manipulations
2. Write a program for Creating and manipulating a List and an Array
3. Write a program for Merging two Data Frames
4. Write a program for concatenating two strings.
5. Write briefly about Histograms and Density Charts
6. Write a program for performing Simple Linear Regression.