

RAJALAKSHMI ENGINEERING COLLEGE

RAJALAKSHMI NAGAR, THANDALAM - 602 105



**RAJALAKSHMI
ENGINEERING COLLEGE**

**CS23221
PYTHON PROGRAMMING LAB**

Laboratory Observation Note Book

Name: Keerthana.S

Year/Branch/Section: 1-year/CSE(CS)

Register No: 2116231901022

Semester: 2nd Semester

Academic Year: 2023 - 2024



INDEX

Reg. No: 2116231901022

Name: Keerthana .S

Year: 1 year

Branch: CSE(CS)

Sec: A

S. No.	Date	Title	Page No.	Teacher's Signature / Remarks
Introduction to python-Variables-Datatypes-Input/Output-Formatting				
1.1	12.03.24	Converting Input Strings	8	
1.2	12.03.24	Gross salary	10	
1.3	12.03.24	Square Root	11	
1.4	12.03.24	Gain percent	12	
1.5	12.03.24	Deposits	14	
1.6	12.03.24	Carpenter	16	
Operators in Python				
2.1	06.04.24	Widgets and Gizmos	19	
2.2	06.04.24	Doll Sings	20	
2.3	06.04.24	Birthday party	22	
2.4	06.04.24	Hamming Weight	24	
2.5	06.04.24	Compound Interest	25	
2.6	06.04.24	Eligible to donate blood	26	
2.7	06.04.24	C or D	28	
2.8	06.04.24	Troy Battle	30	
2.9	06.04.24	Tax and Tip	32	



2.10	06.04.24	Return last digit of the given number	34	
Selection Structures in Python				
3.1	12.04.24	Admission eligibility	37	
3.2	12.04.24	Classifying triangles	40	
3.3	12.04.24	Electricity Bill	42	
3.4	12.04.24	IN/OUT	45	
3.5	12.04.24	Vowel or Constant	47	
3.6	12.04.24	Leap Year	49	
3.7	12.04.24	Month name to Days	52	
3.8	12.04.24	Pythagorean triple	54	
3.9	12.04.24	Second Last Digit	56	
3.10	12.04.24	Chinese Zodiac	58	
Algorithmic Approach: Iteration Control Structures				
4.1	13.04.24	Factors of a Number	61	
4.2	13.04.24	Non-Repeated Digits Count	63	
4.3	13.04.24	Prime Checking	64	
4.4	13.04.24	Next Perfect Square	66	
4.5	13.04.24	Nth Fibonacci	67	
4.6	13.04.24	Disarium Number	69	
4.7	13.04.24	Sum of Series	70	
4.8	13.04.24	Unique Digits Count	72	
4.9	13.04.24	Product of single digits	73	
4.10	13.04.24	Perfect Square After adding One	75	
Strings in Python				
5.1	17.04.24	Count chars	78	
5.2	17.04.24	Decompress the String	79	
5.3	17.04.24	First N Common Characters	80	
5.4	17.04.24	Remove Characters	82	
5.5	17.04.24	Remove Palindrome Words	84	
5.6	17.04.24	Return Second Word in Uppercase	85	
5.7	17.04.24	Reverse String	87	
5.8	17.04.24	String characters balance Test	88	
5.9	17.04.24	Unique Names	89	
5.10	17.04.24	Username Domain Extension	90	



List in Python				
6.1	04.05.24	Monotonic array	93	
6.2	04.05.24	Check pair with difference k .	96	
6.3	04.05.24	Count Elements	98	
6.4	04.05.24	Distinct Elements in an Array	101	
6.5	04.05.24	Element Insertion	104	
6.6	04.05.24	Find the Factor	107	
6.7	04.05.24	Merge list	111	
6.8	04.05.24	Merge Two Sorted Arrays Without Duplication	114	
6.9	04.05.24	Print Element Location	117	
6.10	04.05.24	Strictly increasing	124	
Tuples & Set				
7.1	18.05.24	Binary String	126	
7.2	18.05.24	Check Pair	131	
7.3	18.05.24	DNA Sequence	133	
7.4	18.05.24	Print repeated no	136	
7.5	18.05.24	Remove repeated	138	
7.6	18.05.24	malfunctioning keyboard	141	
7.7	18.05.24	American keyboard	143	
Dictionary				
8.1	25.05.24	Uncommon Words	145	
8.2	25.05.24	Sort Dictionary By Values Summation	149	
8.3	25.05.24	Winner Of Election	151	
8.4	25.05.24	Student Record	154	
8.5	25.05.24	Scramble Score	156	
Functions				
9.1	01.06.24	Abundant Number	158	
9.2	01.06.24	Automorphic number or not	161	
9.3	01.06.24	Check Product of Digits	166	



9.4	01.06.24	Christmas Discount	169	
9.5	01.06.24	Coin Change	170	
9.6	01.06.24	Difference Sum	171	
9.7	01.06.24	Ugly number	172	
Searching & Sorting				
10.1	01.06.24	Merge Sort	173	
10.2	01.06.24	Bubble Sort	174	
10.3	01.06.24	Peak Element	175	
10.4	01.06.24	Binary Search	176	
10.5	01.06.24	Frequency of Numbers	177	
Exception Handling				
11.1	02.06.24	Exception Handling-1	178	
11.2	02.06.24	Exception Handling-2	180	
11.3	02.06.24	Exception Handling-3	181	
11.4	02.06.24	Exception Handling-4	183	
11.5	02.06.24	Exception Handling-5	185	
Modules				
12.1	07.06.24	Representing unique pairs	187	
12.2	07.06.24	Calculating average	190	
12.3	07.06.24	Using dictionary	191	
12.4	07.06.24	Power of four	193	
12.5	07.06.24	Determining the total revenue	195	

