To Programming Class

Input and output statements

1. Write a program to print the square of a given integer number.
2. Write a program to find the product of two float numbers.
3. Write a program to find the area of a rectangle.
4. Write a program to reverse the given string.
5. Write a Program to find the sum, difference, product and division.Between 2 integer numbers.
6. Write a program to find the simple interest.
7. Write a program to calculate area of triangle
8. Write a Python code to swap two variables.
9. Write a Python program to calculate the square root of a given number
10. Write a Python program to find the area of a circle.

Simple if

11. Write a program To register.For a company only if job location is Bangalore.
12. Write a program to check whether the given number is even
13. Write a program to check whether the given number is odd
14. Write a program to check whether the given number lies between 5 to 10
15. Write a program To check whether the given string is having more than three characters
16. Write a program.To check whether the given number is having.4 digits
17. Write a program to check whether the given character is a vowel
18. Write a program to check whether the given integer number is even and multiple of five
19. Write a program.To check whether the given string is character
20. Write a program.To check whether the given character is uppercase alphabet
21. Write a program.To check whether the given character is lowercase alphabet
22. Write a program to check whether the given character is digit
23. Write a program to check whether the given character is alphabet

24. Write a program to check whether the given character is a special character
25. Write a program to check whether the given collection is List
26. Write a program to check whether the entered value is default
27. Write a program to check whether The list consists of even number of values
28. Write a program to check whether a list consists of middle value
29. Write a program to check whether the entered input is.Immutable.
30. Write a program to check whether the entered input is mutable.
31. Write a program to check whether The entered input is a single value
32. Write a program to check whether the entered input is multivalue or not.
33. Write a program to check whether the entered number is having only single Digit.

If else

34. Write a program to check whether the given number is even or odd.
35. Write a program to check whether the given data is mutable or immutable.
36. Write a program to check whether the given data is single value or collection.
37. Write a program to check whether a given character is a special symbol or not.
38. Write a program to check whether the given string is having the middle character or not.
39. Write a program to check whether the given 2 variables are pointing to the same memory location or not.
40. Write a program to check whether the first value present inside the given list is complex or not.
41. Write a program to take and consider a tuple collection consisting of only two values. Check whether the taken tuple is homogeneous or heterogeneous.
42. Write a program to check whether the given integer number is multiple of 10 or not.
43. Write a program to consider an integer number. If the number is even then print square of the number else print the cube of the number.
44. Write a program to check whether the given string is palindrome or not.

45. Write a program to consider string input, if it is having more than three characters then print length of the string else print string as it is.
46. Write a program to check whether the user is eligible to vote or not.
47. Write a program to check whether a number is divisible by 7 or not.
48. Write a program to check whether the last digit of a number entered by the user is divisible by three or not.
49. Write a program to check whether the year is leap year or not.
50. Write a program to check whether a number entered is a 3 digit number or not.
51. Write a program to find the largest number out of two numbers expected from the user.
52. Write a program to check whether a number.Entered by the user is positive or negative.
53. Write a program.To check whether a number accepted from the user is divisible by two and three both.

Elif statement

54. Write a program to check the relation between two integer numbers
55. Write a program to check whether a given character is uppercase or lowercase or number. If character is uppercase print uppercase, If character is lowercase print lowercase. If the character is a number, print the ascii number of it.
56. Write a program to check whether a given character is a vowel or consonant. If a given character is a vowel, store the character inside the list. If a given character is consonant, display the ASCII value of that character.
57. Write a program to check whether a given character is uppercase. If it is uppercase, convert it to lowercase.Else PRINT LOWERCASE.
58. Write a program to checkWhether the entered character is a number. If it is a number, print the ASCII value of that number.
59. Write a program to check whether given character is uppercase, print its lowercase character or if given character is lowercase print its uppercase character or if given character is special character print the character after adding 8 to the ascii value of that particle special character
60. Write a program to check whether the last character of a given string is a special character or not.

61. Write a program to check if the middle value of heterogeneous tuple collection is integer or not.
62. Write a program to check if the given data is individual data type or not.
63. write a program to check whether the given integer single digit or two digits or three digits or more than three digits
64. write a program to print 'Fizz' if the given number is multiple of three print 'buzz' if the given number is multiple of 5 and print 'Fizzbuzz' if the number is multiple of both 3 and 5
65. Write a program to predict grade of the student based on the obtained result
66. Write a program to check whether the entered character is uppercase or lowercase or number or special character
67. Write a program to find the greatest among two numbers
68. Write a program to find the smallest among three numbers
69. Write a program to find the greatest among four numbers
70. Write a program to find the smallest among four numbers
71. Write a program to calculate the electricity bill.According to the following criteria, for 1st 100 units there is no charge, For next 100 units there is ₹5 per unit and after 200 units, the price is rupees 10 per unit.If the input is 350 then total bill amount is Rupees 2000.
72. Write a program to accept percentages from the user and display the grade according to the following criteria. If marks is greater than 90, grade is A. If marks is greater than 80 and less than equals to 90, gra inde is B if marks is greater than or equal to 60, and less than equals to 80 grade is C, else if it is less than 60 grade is D
73. Write a program to accept the cost price of a bike and display the road tax to be paid according to the following criteria if cost price is greater than One Lac.The tax is 50%, if it is greater than 50,000 and less than equals to 1,00,000 the tax is 10% and if it is less than equals to 50,000 the tax is 5%.
74. Write a program to accept a number from one to seven and display the name of the day. Like one for Sunday, 2 for Monday and so on.
75. Write a program to accept a number from 1:00 to 12:00 and display name of the month and days in that month like one for January and number of days is 31 and so on.
76. Accept any city from the user and display monuments of that city. For Delhi it is Red Fort, Agra- Taj Mahal, Jaipur- Jal Mahal.

77. Accept three sides of a triangle and check whether it is an equilateral, isosceles or scalene triangle.
78. Accept the number of days from the user and calculate the charge of library according to the following criteria. Till five days it is ₹2 per day, 6 to 10 days it is ₹3 per day, 11 to 15 days it is ₹4.00 per day and after 15 days it is five Rupees per day.
79. Accept the kilometers covered and calculate the bill according to the following criteria. For 1st 10 kilometers it is ₹11.00 per kilometer, For next 90 kilometers it is rupees 10 per kilometer and after that it is ₹9 per kilometer.
80. WAP to convert temperature from celsius to kelvin and kelvin to celsius using the elif statement.

Nested If

81. Write a program to create an Instagram login page.
82. Program to print middle value of the given heterogeneous tuple collection only if the middle value is string and having the length greater than 3
83. Write a program.To check the greater among four numbers using nested if.
84. Write a program to find the second greatest among four numbers.
85. Write a program.To check the type of a given character.
86. Write a program to consider an integer number. Print happy if the number is divisible by two. Print SAD if the number is divisible by 5 and print square of the numbers only if it is divisible by seven else print the number as it is.
87. Write a program to find the smallest among three numbers.
88. Program to consider an input string. Print the string as it is if it is palindrome. Print the reverse string if it has an even number of characters. Print all the characters present at an odd index if the string is having an odd number of characters.
89. Write a program to print middle Character.Given string only if it is upper case character.
90. Write a program to check whether a given character is vowel or consonant using nested if.
91. Write a program to print the length of given data only if it is even.

92. Write a program to check greatest among three numbers using nested if.

93. Write a program.To check second greatest among three numbers using nested if.

94. Write a program that determines the movie ticket price based on the age and day of the week
Adults (18+): $12 (except for Tuesdays: $10)
Children (under 18): $8 (except for Tuesdays: $6)
Seniors (65+): $8 (always)

95. Leap Year Checker: Write a program that determines if a given year is a leap year. A leap year is a year divisible by 4, but not by 100 unless it's also divisible by 400.

96. Vending Machine: Create a program for a vending machine that takes product code (integer) and amount paid (float) as input. It should check the product price (stored in a dictionary) and dispense the product if enough is paid. Use nested ifs for different error messages (e.g., invalid code, insufficient funds).

97. Restaurant Discount: Write a program that calculates a restaurant bill with a discount based on the day of the week and party size:
Weekdays (Mon-Fri), party < 4: No discount.
Weekdays (Mon-Fri), party >= 4: 10% discount.
Weekends (Sat-Sun), any party size: 15% discount.

98. Shape Identifier: Design a program that takes two inputs (length1, length2) and identifies the geometric shape based on the values:
If lengths are equal: Square
If one length is twice the other: Rectangle
Otherwise: Not a square or rectangle

99. WAP to check the type of a triangle (Equilateral,isosceles,scalene) using nested -if

100. Wap to accept any number from 1 to 5 and display that number in word form. if they enter more than 5 then print no match.

101. Wap to take input as only collections.

i) if the type of input is a list then ask the value from the user and insert it in the middle index of that list. and print that list.

ii) if type of input is tuple print 'cannot append tuple is immutable'

iii)if type is set, take the input from the user. if the value is immutable then only add it to the set and print the set otherwise print 'enter only immutable collection'

iv) if type of input is dictionary take key and value as user input and add the key and value   pair using syntax to add key value . and print the dictionary.