INPUT AND OUTPUT:

1. Write a program to input two integers using parameters and find their sum and product.
2. Write a program to input five integers and find their average.
3. Write a program to input two integers using Scanner and find the product of their sum and difference.
4. Write a program to input three integers and find the difference between their sum and their average.
5. Write a program to input the Principal, Rate and Time for a certain amount of money and print the Simple Interest.
6. Write a program to input the length and breadth of a rectangle and find its area and perimeter. Note: Area of a rectangle=length*breadth Perimeter of a rectangle=2*(length + breadth)
7. Write a program to input the radius of a circle and find its area and perimeter. Note: Area of a circle=22/7* radius2 Circumference of a circle= 2 * 22/7 * radius
8. Write a program to input the length, breadth and height of a cuboid and find its Volume and Total Surface Area. Note: Volume of a cuboid= length*breadth*height Total Surface Area=2*(length*breadth +breadth* height + height*length)
9. Write a program to input the radius and height of a cylinder and find its volume and total surface area.
10. Write a program to input three integers and find the sum of the last digit of the numbers. For example if the inputs are: 12 26 35 Output: Sum of the last digit of the integers are: 13
11. Write a program to input the temperature in Fahrenheit and change it to Celsius. Note: The relation between Fahrenheit and Celsius is given by the formula: Where C=Celsius and F=Fahrenheit
12. Write a program to input time in seconds and display the time broken up as hours, minutes and seconds. For Example: INPUT: Enter Time in Seconds: 4326 OUTPUT: Time in hours:1 Time in minutes:12 Time in seconds:6
13. Write a program to input a floating point number and round it off to the nearest integer. For Example: INPUT: Enter a floating point number: 12.3 OUTPUT: Rounded off to nearest integer:12 INPUT: Enter a floating point number: 14.5 OUTPUT: Rounded off to two places of decimal:15
14. Write a program to input a floating point number and round it off to two places of decimal. For Example: INPUT: Enter a floating point number: 12.367 OUTPUT: Rounded off to two places of decimal:12.37 INPUT: Enter a floating point number: 14.563 OUTPUT: Rounded off to two places of decimal:14.56
15. Write a program to input two integers (say a and b) and interchange their values and display the result. For Example: INPUT: Enter two integers: 15 36 OUTPUT: Before interchange: a=15 and b=36 after interchange: a=36 and b=15 Please note that you can take just one variable other than a and b for interchanging.
16. Write a program to input the time in hours, minutes and seconds and print it in seconds. For Example: INPUT: Enter time in hours: 1 Enter time in minutes: 12 Enter time in seconds: 6 OUTPUT: Time in seconds:4326
17. Write a program to input three integers and find their sum, without using the mathematical operator +

18. Write a program to enter the perimeter of a square and find its perimeter. For Example, INPUT: Enter the perimeter of a square: 64 OUTPUT: Area of the square is: 256
19. Write a program to enter the length and area of a rectangle and find its perimeter. For Example, INPUT: Enter the length of the rectangle:12 Enter the area of the rectangle: 72 OUTPUT: Perimeter of the rectangle:36.0
20. Write a program to input the Basic Pay of an employee and find the gross pay of the employee for the following allowances and deductions. Dearness Allowance = 25% of Basic Pay House Rent Allowance=15% of Basic Pay Provident Fund=8.33% of Basic Pay Net Pay=Basic Pay + Dearness Allowance + House Rent Allowance Gross Pay= Net Pay – Provident Fund
21. Write a program to input the dimensions of a rectangle and find the area of that square whose perimeter is equal to the perimeter of the rectangle.
22. Write a program to input an integer and if positive change it to negative and if negative change it to positive. INPUT: Enter an integer: 12 OUTPUT: Sign changed:-12 INPUT: Enter an integer: -14 OUTPUT: Sign changed: 14
23. If the marks obtained by a student in five different subjects are input through the keyboard, write a program to find out the aggregate marks and percentage marks obtained by the student. Assume that the maximum marks that can be obtained by a student in each subject is 100.
24. If the total selling price of 15 items and the total profit earned on them is input through the keyboard, write a program to find the cost price of one item.

MATHEMATICAL METHODS

1. Write a program to input the area of a square and find its perimeter.
2. Write a program to input the length and breadth of a rectangle and find its diagonal.
3. Write a program that outputs the results of the following evaluations based on the number entered by the user. i. Cube root of the number ii. Absolute value of the number iii. Square root of the number iv. Random numbers between 0 and 1.
4. Write a program to input the radius of a circle and find its area and circumference.
5. Write a program to input the area of a circle and find its circumference.
6. Write a program to input three integers and find the sum of their cube roots.
7. Write a program to input the principal, rate and time and find the compound interest.
8. Write a program to input the three sides of a triangle and find the perimeter and area of the triangle. If a, b and c are the 3 sides then, Perimeter=a + b + c
9. Write a program to input a real number (floating point number) and round it off to 2 places of decimal. For example, Input: 4.3678 Output: 4.37 Input: 24.3123 Output: 24.31
10. Write a program to input the length and breadth of a rectangle and find the perimeter of that square whose area is same as the area of the rectangle.
11. Write a program to input three integers and find the sum of the cube roots of their last digits.