

Level 1

Operators

1. Write a program to print the following output for the given values $a=10, b=20$ Output expected is: $10+20=30$ $10-20=-10$ $10*20=200$ $10/20=0$ $10\%20=10$
2. Write a program to print the following for a given value $a=3$; Output expected: $3*1=3$ $3*2=6$ $3*3=9$ $3*4=12$ $3*5=15$ $3*6=18$
3. Given a variable var x = 23. Increment its value by 1.
4. Print the sum of 12 and 23 using the addition operator.
5. Print the difference of 52 and 36 using the subtraction operator.
6. Print the product of 23 and 56 using the multiplication operator.
7. Divide 36 by 5 and print the output by using the division operator.
8. Divide 67 by 4 and print the quotient.
9. Divide 48 by 7 and print the remainder.
10. Print the value of 2 raised to the power of 6.
11. Given var x = "Edupoly" and var y = "Training". Print "Edupoly Training" in the console.
12. Find the perimeter of a square having each side 4cm.
13. Find the perimeter of a rectangle of length 50cm and breadth 35cm.
14. Find the circumference of a circle of radius 20cm. (Take $\pi = 3.14$)
15. Find the area of a square having each side 12cm.
16. Find the area of a rectangle of length 25cm and breadth 16cm.
17. Find the area of a circle of radius 3.75cm.
18. Given the marks of 3 subjects as 67,48 and 74. Print the average marks of the 3 subjects.
- 19. Given the cost of a product as ₹538.56, add 18% GST to it and print the total cost.**
20. Given a variable var x = 48. Decrement its value by 1.
21. Write a script to swap two numbers;
22. Write a script to swap two numbers without using 3rd variable (please use *,%,/ not + and -)
23. Write a program to print the remainder of a division
24. Write a program to print the simple interest rate of given P T R values
25. Write a program to print the simple interest rate of given P T R values
26. Write a program to print the max of given two numbers using ternary operator
27. Write a program to print the max of given three numbers using ternary operator
28. Find the area of a square for given length of a side
29. Find the area of a square for given length of a side
30. Find the area of a rectangle for given length and breadth
31. Find the area of a triangle for given base and height
32. Check a given number is even or not using ternary operator
33. Check a given number is odd or not using ternary operator
34. Check a given number is positive or not using ternary operator
35. Check a given number is multiple of 4 or not using ternary operator
36. Print the $(a+b)^2$ for given a and b values
37. Print the $(a+b)^3$ for given a and b values
38. Print the $(a+b+c)^2$ for given a,b and c values

39. Ramesh's basic salary is input through the keyboard. His dearness allowance is 40% of basic salary, and house rent allowance is 20% of basic salary. Write a program to calculate his gross salary.
40. The distance between two cities (in km.) is input through the keyboard. Write a program to convert and print this distance in meters, feet, inches and centimeters.
41. If the marks obtained by a student in five different subjects are input through the keyboard, 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.
42. Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a program to convert this temperature into Centigrade degrees.
43. The length & breadth of a rectangle and radius of a circle are input through the keyboard. Write a program to calculate the area & perimeter of the rectangle, and the area & circumference of the circle.
44. Two numbers are input through the keyboard into two locations C and D. Write a program to interchange the contents of C and D.

if...else

- Write a program to check if a number is divisible by 7 or not.
- Write a program to check if a number is a factor of 84 or not.
- Write a program to check if a number is a factor of 96 or not.
- and if the given number is more Than 96 program should say 'not a valid input'
- Write a program to check if a number is multiple of 3 or not.
- Write a program to check if a number is positive or not.
- Write a program to check a number is having 4 at units place (984) using % operator.
- Write a program to check if a number is a 3 digit number or not.
- Write a program to print even or odd for a given number
- Write a program to print the greatest number in given two numbers
- Write a program to print the least number in given two numbers
- Write a program to print the given two numbers in ascending order
- Write a program to print the given two numbers in descending order

loops

- Write a program to print 1 to 10 numbers
- Write a program to print 5 to 10 numbers
- Write a program to print -10 to 10 numbers
- Write a program to print -45 to -25 numbers
- Write a program to print 35 to 45 numbers
- Write a program to print 21 to 57 numbers
- Write a program to print 10 to 1 numbers
- Write a program to print 25 to 1 numbers
- Write a program to print 38 to 25 numbers
- Write a program to print 10 to -10 numbers
- Write a program to print -2 to -18 numbers

Write a program to print the first ten multiples of 4(multiples of 4 are 4,8,12,16,20,.....)

Write a program to print multiplication table of 6

Print the squares of all numbers from 1 to 10.

Print the cubes of all numbers from 1 to 10.

arrays

For the Given array: [23,34,54,0,4,7] print all the Array values using a for loop. Expected output:
23 34 54 0 4 7

print all numbers in an array except the first element. Expected output: 34 54 0 4 7

Print all elements in an array except the last element Expected output: 23 34 54 0 4

Print all the numbers from last index to first index Expected output: 7 4 0 54 34 23

Print all the numbers from last index to first index except the first element Expected output: 4 0
54 34 23

Print all the numbers from last index to first index except the last element Expected output: 7 4 0
54 34

Print only the last 4 elements of an array. Expected output: 54 0 4 7

For the Given array: [23,34,54,10,4,7] print values that are greater than the given number. Given
number: 20, Expected output: 23,34,54

For the Given array: [23,34,54,10,4,7] print all the even numbers in an Array. Expected output:
34,54,10,4

For the Given array: [23,34,54,10,4,7] print all the odd numbers in an Array. Expected output:
23,7

For the Given array: [23,-34,-54,10,-4,7] print all the positive numbers in an array. Expected
output: 23,10,7

Print only the 2 digit numbers from an array

Print only multiples of 5 from an array

Print only multiples of 2 AND 3 from an array

Print only multiples of 3 OR 5 from an array

Objects

Q.Given an object:

```
var person = {  
  "firstName" : "Harry",  
  "lastName" : "Potter",  
  "age": 30,  
  "gender": "male",  
  "skill" : "ReactJS",  
  "expertise": "Beginner"  
};
```

1. Print the firstname.

2. Print the lastname.
3. Print the fullname("Harry Potter").
4. If the age is less than 18, then print "false". If the age is more than 18, then print "true".

Q. For the given marks object solve the following

```
var marks = {  
    "maths" : 34,  
    "english" : 56,  
    "science": 32,  
    "hindi" : 75,  
    "social science": 65  
};
```

1. Print the marks of all the subjects.
2. Print the names of all the subjects from the given object.
3. Count the number of subjects from the given object.
4. Print the percentage of the marks of the student.
5. Print only those subjects where the student scored more than 35.
6. Print the pass/fail status of the subjects provided 35 is the pass mark.
7. Print only the passed subjects.
8. Count the number of passed subjects.
9. Print only the failed subjects.
10. Count the number of failed subjects.
11. Print the least scored subject.
12. Print the highest scored subject.
13. Check whether the student has passed in all the subjects or not.
14. Take the subject name from the student through prompt box and print the subject marks and pass/fail status.

Level 2

Operators

1. If a five-digit number is input through the keyboard, write a program to calculate the sum of its digits. (Hint: Use the modulus operator '%')
2. If a five-digit number is input through the keyboard, write a program to reverse the number.
3. If a four-digit number is input through the keyboard, write a program to obtain the sum of the first and last digit of this number.
4. In a town, the percentage of men is 52. The percentage of total literacy is 48. If total percentage of literate men is 35 of the total population, write a program to find the total number of illiterate men and women if the population of the town is 80,000.
5. A cashier has currency notes of denominations 10, 50 and 100. If the amount to be withdrawn is input through the keyboard in hundreds, find the total number of currency notes of each denomination the cashier will have to give to the withdrawer.

6. 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.
7. If a five-digit number is input through the keyboard, write a program to print a new number by adding one to each of its digits. For example if the number that is input is 12391 then the output should be displayed as 23402.
8. Write a program that converts Centigrade to Fahrenheit. Expected Output : Input a temperature (in Centigrade): 45 113.000000 degrees Fahrenheit.
9. Write a JavaScript program that calculates the volume of a sphere. Expected Output : Input the radius of the sphere : 2.56 The volume of the sphere is 70.276237.
10. Write a JavaScript program that prints the perimeter of a rectangle to take its height and width as input. Expected Output : Input the height of the Rectangle : 5 Input the width of the Rectangle : 7 Perimeter of the Rectangle is : 24.000000
11. Write a JavaScript program that converts kilometers per hour to miles per hour. Expected Output : Input kilometers per hour: 15 9.320568 miles per hour
12. Write a JavaScript program that takes hours and minutes as input, and calculates the total number of minutes. Expected Output : Input hours: 5 Input minutes: 37 Total: 337 minutes.
13. Write a program in JavaScript that takes minutes as input, and display the total number of hours and minutes. Expected Output : Input minutes: 546 9 Hours, 6 Minutes
14. Write a program in JavaScript that reads a forename, surname and year of birth and display the names and the year one after another sequentially. Expected Output : Input your firstname: Tom Input your lastname: Davis Input your year of birth: 1982 Tom Davis 1982
15. Write a program in JavaScript to calculate the sum of three numbers with getting input in one line separated by a comma. Expected Output : Input three numbers separated by comma : 5,10,15 The sum of three numbers : 30
16. Write a JavaScript program to perform addition, subtraction, multiplication and division of two numbers Expected Output : Input any two numbers separated by comma : 10,5 The sum of the given numbers : 15 The difference of the given numbers : 5 The product of the given numbers : 50 The quotient of the given numbers : 2.000000
17. Write a JavaScript program to find the third angle of a triangle if two angles are given. Expected Output : Input two angles of triangle separated by comma : 50,70 Third angle of the triangle : 60
18. Write a script to display the maximum number in given two numbers using operators
19. Write a script to display the maximum number in given three numbers using operators
20. Write a script to display the given two strings in ascending order using operators

if...else

Write a program to print the greatest number in given three numbers

Write a program to print the least number in given three numbers

Write a program to print the given three numbers in ascending order

Write a program to print the given three numbers in descending order

Write a program to take marks of three subjects and print the grade of student

Check whether a number is negative, positive or zero.

Check whether a number is divisible by 5 and 11 or not.

loops

loops(while and for) with if...else

Write a program to print even numbers between 1 and 10

Write a program to print odd numbers between 1 and 25

Write a program to print even numbers between 23 and 56

Write a program to print odd numbers between -48 and -12

Write a program to print even numbers between -50 and 8

Write a program to print odd numbers between 10 and 1

Write a program to print even numbers between 20 and 1

Write a program to print odd numbers between 46 and 23

Write a program to print even numbers between 24 and -4

Write a program to print odd numbers between -3 and -36

Write a program to print factors of 24(factors of 24 are 1,2,3,4,6,8,12,24)

Write a program to print all the factors of a given number

a program to read 5 numbers and print the maximum and minimum number

a program to read 5 numbers and print only the even numbers

Print all the digits of a given number

Write a program to print only even digits of a given number The output should be 4,2,6 Ex. Let us take 154256

Write a program to print only odd digits of a given number Ex. Let us take 1542763 The output should be 1,5,7,3

Write a program to print the number at 10's place

Write a program to print the number at 100's place

Write a program to print the number at 1000's place

Write a program to print the number at 10000's place

Write a program to find the LCM of given two numbers

Write a program to convert an octal number to a decimal

Write a program to print the sum of 1 to 10 (initialisation of sum variable with 0)

Write a program to print the average of 1 to 10

Write a program to print the sum of the numbers between the given two numbers

Write a program to print the sum of even numbers between the given two numbers

Write a program to print the sum of odd numbers between the given two numbers

Write a program to print the product of the numbers between 1 to 10 (initialisation of product variable with 1)

Write a program to find the product of all odd numbers between 1 and 10.

Write a program to print the nth power of a given number. n can be any positive number. (n=3 r =4 then answer must be $3*3*3*3$)

Write a program to print factorial of a given number

Write a program to print the number of factors of 24(number of factors for 24 is 8)

Write a program to print the count of factors of a given number

Write a program to check a given number is a prime number or not

a program to read 5 numbers and print the sum of all entered numbers

a program to read 5 numbers and print average of n numbers

print Number of Digits in given number.

Write a program to count the number of '1's in a given number.

Write a program to eliminate all 0's from a given number.

Write a program to print all the digits that are less than 5 in a given number.

Print the greatest digit of a given number(n=1237456 then greatest digit is 7)

sum of all digits of a given number Ex: let us take 19345 is the given number The output should be 22 (1+9+3+4+5)=22

a program to print reverse of digits of a number

arrays

1. For the Given array: [23,34,54,10,4,7] print the minimum number in an Array. Expected output: 4
2. For the Given array: [23,34,54,10,4,7] print the Maximum number in an array. Expected output: 54
3. For the Given array: [23,34,54,10,4,7] sum of all the numbers in an Array. Expected output: 132
4. For the Given array: [23,34,54,10,4,7] Average of all the numbers in an Array. Expected output: 22
5. For the Given array: [23,34,54,10,4,7] search if the given number is there in an array or not. Given number: 34, Expected output: true Given number: 26, Expected output: false
6. For the Given array: [23,34,54,10,34,7,23,10,34] print the total number of times an element found in the array. Given number: 23, Expected output: 2 Given number: 34, Expected output: 3 Given number: 10, Expected output: 2 Given number: 54, Expected output: 1
7. For the Given array: [23,34,54,10,4,7] print index of a given element in an Array. Given number: 23, Expected output: 0 Given number: 34, Expected output: 1 Given number: 10, Expected output: 3 Given number: 54, Expected output: 2
8. a program to store an array into another array var ar = [23,34,54,10,4,7] var br = [] Expected output: br = [23,34,54,10,4,7]
9. Sort an array in ascending order. Given array: [23,34,54,10,4,7] Expected output: 4,7,10,23,34,54
10. Store only even numbers of a given array in another array.
11. print only the perfect squares in an array
12. Given two arrays. Compare the arrays and print the element which is not there in array 2.
13. Find the second largest number in an array.
14. Check whether the given two strings are anagrams or not.
15. Reverse of string without using built-in methods.
16. Count the number of vowels and consonants in a given string.
17. Print
AAAAA
BBBBB
CCC

DD

E

18. Check whether the given string contains digits or not.
19. Print the factorials of all numbers in a given array.
20. Print all prime numbers present in an array.
21. Print the reverse of all numbers present in an array
22. Print all the palindrome numbers in a given array
23. Print the number of digits of all numbers in an array.
24. Print the greatest digit of each number in an array.
25. Print the number of '1's in each number in an array.
26. Print the sum of all digits of each number in an array.

Array of objects

Q. For the given array of object, solve the following

```
var products = [  
  {  
    "name": "Duracell - AAA Batteries (4-Pack)",  
    "type": "HardGood",  
    "price": 5.49,  
    "category": "Household Batteries",  
    "manufacturer": "Duracell",  
  },  
  {  
    "name": "Hard Rock TrackPak - Mac",  
    "type": "Software",  
    "price": 29.99,  
    "category": "Recording Equipment",  
    "manufacturer": "Hal Leonard",  
  },  
  {  
    "name": "Duracell - AA 1.5V CopperTop Batteries (4-Pack)",  
    "type": "HardGood",  
    "price": 5.62,  
    "category": "Household Batteries",  
    "manufacturer": "Duracell",  
  },  
  {  
    "name": "Energizer - MAX Batteries AA (4-Pack)",  
    "type": "HardGood",  
    "price": 5.32,  
    "category": "Household Batteries",  
    "manufacturer": "Energizer",  
  },  
  {
```



```

        "name": "METRA - Antenna Cable Adapter - Black",
        "type": "HardGood",
        "price": 13.99,
        "category": "Antennas & Adapters",
        "manufacturer": "Metra",
    },
    {
        "name": "WipeDrive Six - Mac|Windows",
        "type": "Software",
        "price": 23.99,
        "category": "Maintenance Software",
        "manufacturer": "White Canyon",
    }
];

```

Print all the product names.

Print all the hardgoods.

Print all the softwares.

Print all the categories.

Print only the products manufactured by Duracell.

Print the product names in ascending order of their prices.

Print only those products whose price is more than 14.99.

Print only those products whose price is less than 9.99.

Print the total price of all the hardgoods.

Print the average price of the softwares.

Q. For the given array of object, solve the following

var people = [

```

    {
        "firstname": "praveen",
        "lastname": "gubbala",
        "age": 36,
        "gender": "male",
        "city": "hyd",
        "salary": 10000
    },
    {
        "firstname": "srikanth",
        "lastname": "gubbala",
        "age": 32,
        "gender": "male",
        "city": "bengaluru",
        "salary": 20000
    },

```

```
{
  "firstname": "pradeep",
  "lastname": "reddy",
  "age": 21,
  "gender": "male",
  "city": "hyd",
  "salary": 25000
},
{
  "firstname": "mounika",
  "lastname": "mudiraj",
  "age": 20,
  "gender": "female",
  "city": "nalgonda",
  "salary": 30000
},
{
  "firstname": "nikhil",
  "lastname": "m",
  "age": 22,
  "gender": "male",
  "city": "guntur",
  "salary": 2000
},
{
  "firstname": "riya",
  "lastname": "bhadouria",
  "age": 14,
  "gender": "female",
  "city": "indore",
  "salary": 40000
}
];
```

Print all the firstnames.

Print all the full names.

Print only those names whose age is more than 25.

Print all female names.

Print only those names whose salary is more than 25000 and increase their salaries by 15%.

Using prompt, print only those names whose city is "hyd".

Print the total salary of all the people.

Print all the female names.

Print all the firstnames whose salary is more than 25000.
Using prompt, print all names whose city is "hyd".
Print all the fullnames in the alphabetical order.
Print all the fullnames in the increasing order of their age.
Print all the fullnames in the reverse alphabetical order.
Print all the fullnames in the decreasing order of their salaries.
Print all the cities in which the people live. There should not be any duplicate cities.
Print all the male names whose age is greater than 25.

String assignments

Level 1

1. Take a string value from the user and print it in the console.
2. Take 5 string values from the user and print them in the console.
3. Take a string value from the user and print the first character in the console.
4. Take 5 string values from the user and print the first characters in the console.
5. Take a string value from the user and print the last character in the console.
6. Take 5 string values from the user and print the last characters in the console.
7. Take a string value from the user and print the length of the string in the console.
8. Take a string value from the user and print all the characters in the console.
9. Take a string value from the user and print only alternate characters in the console.
Given string: "abcdef", Expected output: "a" "c" "e"
10. Take a string value from the user and print all the characters in reverse order in the console. Given string: "abcdef", Expected output: "f" "e" "d" "c" "b" "a"
11. Take a string and check whether a given character is present in the string or not. Given string: "edupoly", given character: 'p', Expected output: true
12. Take a string and print the position(index) at which a given character occurs. Given string: "edupoly", given character: "p", Expected output: 3
13. Take two string values from the user, join them together(concatenate) and print it in the console.
14. Copy the characters of a given string from one variable to another variable.
15. Print the reverse of a given string in the console.
16. Check whether a string is palindrome or not.

Level 2

1. Take a string value and print all the positions(index) of a given character in the string.
Given string: "banana", given character: 'a', Expected output: 1,3,5
2. Take a string value and print the first occurrence(index) of a given character in the string.
Given string: "banana", given character: 'a', Expected output: 1
3. Take a string value and print the last occurrence(index) of a given character in the string.
Given string: "banana", given character: 'a', Expected output: 5
4. Take a string value and print the count of a given character in the string. Given string: "banana", given character: 'a', Expected output: 3
5. Find the reverse of a string using split(), reverse() and join() methods.

Level 3

1. Find the first occurrence of a character in a given string.
2. Find the last occurrence of a character in a given string.
3. Search all occurrences of a character in a given string.
4. Count occurrences of a character in a given string.
5. Find the highest frequency character in a string.
6. Find the lowest frequency character in a string.
7. Count the frequency of each character in a string.
8. Remove the first occurrence of a character from a string.
9. Remove the last occurrence of a character from a string.
10. Delete all occurrences of a character from a string.
11. Remove all repeated characters from a given string.
12. Replace the first occurrence of a character with another in a string.
13. Replace the last occurrence of a character with another in a string.
14. Put all occurrences of a character with another in a string.
15. Find the first occurrence of a word in a given string.
16. Find the last occurrence of a word in a given string.
17. Search all occurrences of a word in a given string.
18. Count occurrences of a word in a given string.
19. Remove the first occurrence of a word from the string.
20. Remove the last occurrence of a word in a given string.
21. Delete all occurrences of a word in a given string.
22. A Trim leading white space characters from a given string.
23. Trim trailing white space characters from a given string.
24. Trim both leading and trailing white space characters from a given string.
25. Remove all extra blank spaces from the given string.
26. A String is Palindrome or Not
27. A String Is an Anagram or Not
28. Find the length of a string.
29. Copy one string to another string.
30. Concatenate two strings.
31. Compare two strings.
32. Convert lowercase string to uppercase.
33. Convert uppercase string to lowercase.
34. Toggle case of each character of a string.
35. Find a total number of alphabets, digits or special character in a string.
36. Count the total number of vowels and consonants in a string.
37. Count the total number of words in a string.
38. Find the reverse of a string.
39. Check whether a string is a palindrome or not.
40. Reverse order of words in a given string.
41. Reverse of a number using toString, split, reverse and join methods.
42. Elimination of zeroes from a given number.

43. Find the number of digits of a given number using toString() and length property
44. Write a program to take a string and print only the numeric characters using. Example:
Input->'Q1STR5684AK'; Output->'15684'
45. Search for a given number in an array
46. Print the number of words in a given string
47. Remove the single spaces from a given sentence
48. remove all the spaces from a given string
49. Search a given string in a sentence(both uppercase and lowercase)
50. Write a program to convert a sample sentence string into an array of all the words in the sentence. Example: Input->'Hello World'; Output->['Hello','World']
51. Write a program to eliminate all numeric characters from a string. Example:
Input->'Q1STR5684A'; Output->'QSTRAK'
52. Write a program to take a string and print only the numeric characters. Example:
Input->'Q1STR5684AK'; Output->'15684'
53. Write a program to take a string and print the number of characters in the string.
Example: Input->'Hello'; Output->5
54. Write a program to take a 16-digit credit card number and replace the first 12 characters with 'X'. Example:Input->'9765143265387960'; Output->'XXXXXXXXXXXX7960'
55. Write a program to take a string and replace all vowels with '8'. Example: Input->'This is awesome'; Output->'Th8s 8s 8w8s8m8'
56. Write a program to hide the middle six digits of a phone number. Example: Input->'9876543210'; Output->'98XXXXXX10'
57. Append the calling code of India(+91) to a given phone number. Example: Input->'9876543210'; Output->' +919876543210'
58. Check whether a given number is a valid phone number.
Example:Input->'7654893274'; Output->'valid'
Input->'785487438754'; Output->'invalid'.....(must be 10 digits)
Input->'7854s54839'; Output->'invalid'.....(must NOT contain letters)
59. Check whether a given number is a valid credit card number. Example:
Example:
Input->'7463836483647454'; Output->'valid'
Input->'74638364836474548'; Output->'invalid'...(must be 16 digits)
Input->'7463836w4836o745'; Output->'invalid'...(must contain only numbers)
60. Write a program to add hyphens (-) in between a given credit card number.
Example:
Input->'6484638463487486'; Output->'6484-6384-6348-7486'
61. Sort a given string
Example: 'praveen'=>'aeenprv'
62. Eliminate Duplicate characters in given string

Example: 'praveengubbala' => 'pravengubl'

63. Write a program to print only numbers out of a given string

Example: let us take pr34s2v9q4

The output should be 3,4,2,9,4