

1. Write a Python program to convert temperatures to and from celsius, Fahrenheit
2. Write a Python program to guess a number between 1 to 9.
Note : User is prompted to enter a guess. If the user guesses wrong then the prompt appears again until the guess is correct, on successful guess, user will get a "Well guessed!" message, and the program will exit.
3. Write a Python program to count the number of even and odd numbers from a series of numbers. (to calculate if a number is odd, check if $\text{number} \% 2 == 0$)
4. Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.
5. Write a Python program to get the Fibonacci series between 0 to 50.
The Fibonacci Sequence is the series of numbers :
0, 1, 1, 2, 3, 5, 8, 13, 21,
Every next number is found by adding up the two numbers before it.
6. Write a Python program to calculate a dog's age in dog's years.
Note: For the first two years, a dog year is equal to 10.5 human years. After that, each dog year equals 4 human years.
7. Write a Python program to check whether an alphabet is a vowel or consonant
8. Write a python program that asks for 4 integer variables and prints if they are in ascending order, descending order or unordered.
9. En la empresa XYZ Ltda., las comisiones mensuales que se les pagan a los vendedores se calculan según la siguiente tabla:

Rango de Ventas	% de comisión aplicado
Ventas < 5'000000	2.5
5'000000 <= Ventas < 15'000000	7.5
15'000000 <= Ventas < 30'000000	11.5
30'000000 <= Ventas < 55'000000	15.0
Ventas >= 55'000000	3'050000 + 7.5% (Ventas - 55'000000)

Diseñar un algoritmo para ingresar el total de ventas mensuales de un trabajador y calcular su correspondiente comisión.

10. Diseñar un algoritmo para escribir la tabla de multiplicar del número P desde 1 hasta P
11. Diseñar un algoritmo para escribir y sumar los números enteros del A al B (Ojo: En este caso el algoritmo no debe asumir que $A < B$)
12. Un conjunto de M registros contiene las calificaciones de Matemáticas de un grupo de estudiantes. Diseñar un algoritmo que lea todas las calificaciones, sume las mayores o iguales a 3.0 en una variable y las menores a 3.0 en otra. Al finalizar escriba el número y

el promedio de los alumnos que ganaron matemáticas y los que perdieron

13. Write a program to keep asking for a number until you enter a negative number. At the end, print the sum of all entered numbers.
14. Write a program to ask for a name until the user enters END. Print the name each time. When you are done, print "I am done."
15. Write a program that reads a set of integers, and then prints the sum of the even and odd integers.
16. Write a while loop that asks the user to enter two numbers. The numbers should be added and the sum displayed. The loop should ask the user whether he or she wishes to perform the operation again. If so, the loop should repeat; otherwise it should terminate.
17. Complete the following program to determine the raise and new salary for an employee by adding if ... else statements to compute the raise. The input to the program includes the current annual salary for the employee and a number indicating the performance rating (1=excellent, 2=good, and 3=poor). An employee with a rating of 1 will receive a 6% raise, an employee with a rating of 2 will receive a 4% raise, and one with a rating of 3 will receive a 1.5% raise.
18. Write a program that prompts the user for a temperature, then prints out the activity appropriate for that temperature.

temp >= 80: swimming

60 <= temp < 80: tennis

40 <= temp < 60: golf

temp < 40: skiing

Modify your program so that if the temperature is greater than 95 or less than 20, it prints "Visit our shops!". (Hint: Use a boolean operator in your condition.) For other temperatures print the activity as before.

19. Let's play Rock – Paper – Scissors! Ask the user for two inputs. Each input should be either R for rock, P for paper and S for scissors. Determine the winning player and print it.
20. Modify your rock paper scissors code for letting them play until someone wins two of three games.
21. Write a while loop that will print "I love computer science!!" 100 times
22. Suppose it's election day. There are two candidates left in the poll. Ask for both candidates' votes in all the 10 cities of the state, and calculate who wins the election.

23. Calculate the average of N ages of different people. First, ask the user how many people are there and store the value in the variable N. After that, request all their ages and calculate the average.
24. Ask the user for the sales level of 10 employees, and show at the end the total amount of sales and the average sales level for employee.
25. Drive the user crazy by insisting they re-enter a particular input no matter what they enter. Be creative...