1. Write a program that raises a custom exception when the input age is less than 18, and display an appropriate message.
2. Write a program to handle multiple exceptions: KeyError, IndexError, and ZeroDivisionError.
3. Write a program that demonstrates the difference between global and local variables.
4. Create a simple calculator using functions for addition, subtraction, multiplication, and division, and store these functions in a separate module.
5. Write a function that returns the value of π (pi) to 5 decimal places using math module.
6. Create a program to find the sine and cosine of an angle (in radians) using math.sin() and math.cos().
7. Write a program that simulates rolling a die (1 to 6) using random module.
8. Write a program to randomly select a student from a list using random.choice().
9. Create a program to simulate a random lottery draw of 6 numbers (between 1 and 49) using random.sample().
10. Write a function that uses math.ceil() and math.floor() to round up and round down a floating-point number.
11. Write a function that takes a string as input and returns the number of vowels in the string.
12. Write a recursive function to compute the nth Fibonacci number.
13. Write a program to find the largest of three numbers using a user-defined function.
14. Write a python program using user defined function to find the factorial of a given number.
15. Combine map() and lambda to convert a list of temperatures in Celsius to Fahrenheit.
16. Create a function that takes two numbers and returns their greatest common divisor (GCD).
17. Implement a function that uses the global keyword to change the value of a global variable from inside the function.
18. Develop a function that uses both positional and keyword arguments and demonstrates how to call the function with different sets of parameters.
19. Write a function that calculates the area of a rectangle, square, and circle using default arguments for common shapes.
20. Create a Python function to count the frequency of each element in a list.
21. Write a Python program to check if a number is prime.
22. Create function which returns the common items from two lists. Don’t use builtin functions.
23. Create a function that handles a ValueError if the input is not a number when calculating square roots.