

BCS452- Object Oriented Programming with Java

List of Experiments (Indicative & not limited to)

1. Use Java compiler and eclipse platform to write and execute java program.
2. Creating simple java programs using command line arguments
3. Understand OOP concepts and basics of Java programming.
4. Create Java programs using inheritance and polymorphism.
5. Implement error-handling techniques using exception handling and multithreading.
6. Create java program with the use of java packages.
7. Construct java program using Java I/O package.
8. Create industry oriented application using Spring Framework.
9. Test RESTful web services using Spring Boot.
10. Test Frontend web application with Spring Boot

Java programme :

Q.1 Create a simple authentication system in JAVA where the user is asked to enter a username and password. If the username is "admin" and the password is "password123", print "Access granted." Otherwise, print "Access denied. ?

Q.2 Write a Python function that checks the strength of a password. It should return "Weak" for passwords with fewer than 8 characters, "Medium" for passwords between 8 and 12 characters, and "Strong" for passwords with 12 or more ?

Q.3 Build a basic calculator program that allows the user to choose an operation (addition, subtraction, multiplication, or division) and then enter two numbers. Perform the selected operation and display the result in java ?

Q.4 Create a java function that takes a string as input and counts the number of vowels (a, e, i, o, u) in the string. Use logical operators to check if each character is a vowel and increment the count accordingly. Return the total count of vowels ?

Q. 5 W.A.P to count the number of vowels and consonants , number of digit also other symbol in a given string by the user ?

Q. 6 W.A.P that finds whether a given character is present in a string or not. If present it prints the index at which it is present ?

Q. 7 Create a program that asks the user to enter the price of an item and the user's age. If the user is 65 or older, they get a 10% discount. Calculate and display the final price ?

Q. 8 Write a java program to calculate the Greatest Common Divisor (GCD) of two positive integers.?

Q. 9 W.A.P that counts the occurrences of a character in a string in java ?

Q. 10 W.A.P to remove all duplicates from a string in java ?

Q.11 W.A.P to Print Fibonacci series in java ?

Q.12 W.A.P to print odd number using do while loop in java ?