**Computer Programming 1: Assignment1**

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| Q1 | Create a program that does the following:   1. Ask the user to input their name. 2. Print a greeting to the user with their name. 3. Ask the user to input their age. 4. Calculate the year in which the user will turn 100 years old. 5. Print a message to the user stating what year they will turn 100 years old.   Here is an example of what the program should output  What is your name?  Ali  Hello, Ali!  What is your age?  25  You will turn 100 years old in 2096.  **Answer :** |
| Q2 | Create a program to calculate the average of a list of numbers.  Requirements:   1. The program should prompt the user to enter the number of values they want to calculate the average for. 2. The program should then prompt the user to enter each value, one at a time. 3. After all values have been entered, the program should calculate the average and display it to the user.   Here is an example of what the program should output: Enter the number of values to calculate the average for: 5  Enter value 1: 10  Enter value 2: 20  Enter value 3: 30  Enter value 4: 40  Enter value 5: 50  The average is: 30.0  **Answer :** |
| Q3 | Write a program that generates a random number between 1 and 100, and asks the user to guess the number. The program should then indicate whether the user's guess is too high, too low, or correct. The program should continue to prompt the user to guess the number until they guess correctly.  **Answer :** |
| Q4 | Write a program that asks the user to enter a number, and then determines whether the number is even or odd. The program should display a message dialog indicating whether the number is even or odd.  **Answer :** |
| Q5 | Write a program that calculates the factorial of a number. The program should ask the user to enter a number, and then display the factorial of that number.  **Answer** : |
| Q6 | Rewrite the following **if-else** statement using **switch** statement.  Convert the following into one switch statement:  if (x== 2 || x == 3)  System.out.println("Two or Three");  else if (x == 4)  System.out.println("Four");  else System.out.println("other value");  **Answer :** |
| Q7 | Rewrite the following decision statement using the conditional operator **(?:)**. if(number %2 == 0) System.out.println(“This is an even number.”); else System.out.println(“This is an odd number.”);  **Answer:** |
| Q8 | Write a program to read a positive integer and to print true if it is prime otherwise false  **Answer**: |