

Question Number	Revised Question
Q1	<p><b>Write a program to input three numbers and find the maximum.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>findMax(int num1, int num2, int num3)</code> that takes three integers as parameters and returns the maximum value. Ensure appropriate use of conditional statements to compare the numbers.</li> </ul>
Q2	<p><b>Write a program to input flight name, ticket cost, and the number of seats. Calculate and show the total amount for the journey.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>calculateTotalAmount(float ticketCost, int numberOfSeats)</code> that takes the ticket cost and number of seats as arguments and returns the total amount (ticket cost multiplied by number of seats). Make sure to handle inputs and outputs appropriately.</li> </ul>
Q3	<p><b>Write a program to input a person's income amount, monthly expenses such as phone bill, electricity bill, and traveling. Calculate and show how much the person saved after paying expenses.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>calculateSavings(float income, float phoneBill, float electricityBill, float travelExpenses)</code> that takes the income and expenses as arguments and returns the savings (income minus total expenses).</li> </ul>
Q4	<p><b>Write a program to input any 5-digit integer number. Print the addition of the second and second-last digit. Print the multiplication of the first and last digit.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>processDigits(int num)</code> that takes a 5-digit number as input, processes its digits, and prints the sum of the second and second-last digits, as well as the product of the first and last digits. Ensure that the number is a 5-digit integer and handle any exceptions gracefully.</li> </ul>
Q5	<p><b>Write a program to input the total loan amount required, the number of years, and the age of a person. Check the following conditions to determine whether the person is eligible for the loan.</b></p> <ol style="list-style-type: none"> <li>If the age is more than 50, the person is eligible for a maximum loan of 5 lakh rupees.</li> <li>If the age is between 30 and 50, the person is eligible for a maximum loan of 3 lakh rupees.</li> <li>If the age is between 20 and 30, the person is eligible for a maximum loan of 2 lakh rupees.</li> <li>If the age is below 20, the person is not eligible.</li> </ol> <ul style="list-style-type: none"> <li>- Define a function <code>checkLoanEligibility(int age, float loanAmount)</code> that takes the age and required loan amount as arguments and returns whether the person is eligible for the loan, based on the conditions.</li> </ul>
Q6	<p><b>Write a program to input any 3-digit number and check whether it is a palindrome number.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>isPalindrome(int num)</code> that takes a 3-digit number as input, checks if the number is a palindrome, and returns a boolean indicating whether the number and its reverse are the same.</li> </ul>
Q7	<p><b>Write a program to input two numbers. Define a function called addition to calculate the sum and return the result from the function.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>addition(int num1, int num2)</code> that returns the sum of two integers passed as arguments. The result should be printed in the <code>main()</code> function.</li> </ul>
Q8	<p><b>Write a program to input any 5 string values from the command line. Show them using a for loop in the main() function.</b></p> <ul style="list-style-type: none"> <li>- Define a function <code>inputStrings()</code> to input 5 string values. Then use a loop to display these values in the <code>main()</code> function. Make sure to handle user input appropriately.</li> </ul>

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Q9	<p><b>Write a program to input a number from the user and check whether it is a prime number or not.</b></p> <p>- Define a function <code>isPrime(int num)</code> that takes an integer as input and returns whether the number is prime. Use a loop to check for divisibility, and return the appropriate message in the <code>main()</code> function.</p>
Q10	<p><b>Write a program to input the percentage of a student. Check the conditions and print the student's grade.</b></p> <p>a) If the percentage is 75% or more, print "Distinction".      b) If the percentage is between 60% and 75%, print "First Class".      c) If the percentage is between 50% and 60%, print "Second Class".      d) If the percentage is between 40% and 50%, print "Pass".      Otherwise, the student is "Fail".</p> <p>- Define a function <code>determineGrade(float percentage)</code> that takes the percentage as input and returns the appropriate grade based on the given conditions.</p>

### Additional Notes:

- **Modularity:** Make sure that your solution is modular. Each function should perform a single task, making the code easier to test, debug, and maintain.
- **Input Validation:** Always validate the inputs, especially when they are provided by the user. This prevents incorrect or unexpected behavior.
- **Return Values:** Ensure each function returns a value if necessary, and use it in the `main()` function to display the result to the user.