

Assignment -2

Q 1 WRITE a Program to Calculate the Average of Numbers in a given list.

Q2. Write a program to reverse a given number by the user.

Q 3. Write a Program to print all Numbers in a Range Divisible by a Given Number.

Problem Solution

1. Take in the upper range and lower range limit from the user.
2. Take in the number to be divided by from the user.
3. Using a for loop, print all the factors which is divisible by the number.
4. Exit.

Q4. Write a program to Check Whether a Number is Positive or Negative.

Q5. Write a program to take in the Marks of 5 Subjects and Display the Grade:

Runtime Test Cases

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Case 1:
Enter marks of the first subject: 85
Enter marks of the second subject: 95
Enter marks of the third subject: 99
Enter marks of the fourth subject: 93
Enter marks of the fifth subject: 100
Grade: A

Case 2:
Enter marks of the first subject: 81
Enter marks of the second subject: 72
Enter marks of the third subject: 94
Enter marks of the fourth subject: 85
Enter marks of the fifth subject: 80
Grade: B
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Q6. Write a program to Read Two Numbers and Print Their Quotient and Remainder.

Q7. Write a program to Accept Three Digits and Print all Possible Combinations from the Digits:

Problem Solution

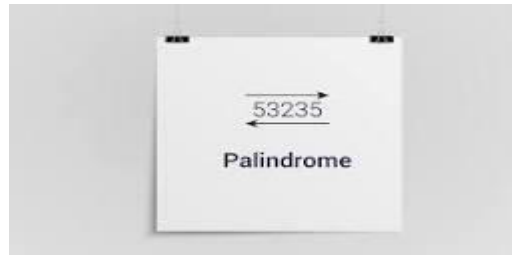
1. Take in the first, second and third number and store it in separate variables.
2. Then append all the three numbers to the list.
3. Use three for loops and print the digits in the list if none of their indexes are equal to each other.
4. Exit.

Q8. Write a Program to Find the Sum of Digits in a Number?

Problem Solution

1. Take the value of the integer and store in a variable.
 2. Using a while loop, get each digit of the number and add the digits to a variable.
 3. Print the sum of the digits of the number.
 4. Exit.
- Q9. Write a Program to Count the Number of Digits in a Number?

Q10. Write a Program to Check if a Number is a Palindrome?



Problem Solution

1. Take the value of the integer and store in a variable.
2. Transfer the value of the integer into another temporary variable.
3. Using a while loop, get each digit of the number and store the reversed number in another variable.
4. Check if the reverse of the number is equal to the one in the temporary variable.
5. Print the final result.
6. Exit.

Q11. Write a Program to Print all Integers that Aren't Divisible by Either 2 or 3 and Lie between 1 and 50 .

Problem Solution

1. Use a for-loop ranging from 0 to 51.
2. Then use an if statement to check if the number isn't divisible by both 2 and 3.
3. Print the numbers satisfying the condition.
4. Exit.

Q12. Write a Program to Read a Number n and Print the Natural Numbers Summation Pattern

Problem Solution

1. Take a value from the user and store it in a variable n.
2. Use two for loop where the value of j ranges between the values of 1 and n and value of i ranges between 1 and j.
3. Print the value of i and '+' operator while appending the value of i to a list.
4. Then find the sum of elements in the list.
5. Print '=' followed by the total sum.
6. Exit.

Q13. Write a Program to Print an Identity Matrix

Problem Solution

1. Take a value from the user and store it in a variable n.
2. Use two for loop where the value of j ranges between the values of 0 and n-1 and value of i also ranges between 0 and n-1.
3. Print the value of 1 when i is equal to j and 0 otherwise.
4. Exit

Q14. Write a Program to Print an Inverted Star Pattern.