A Project Report

on

Spelling Practice Application with Feedback



by

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# Project Report: Multiplication Table Generator

## Introduction

This project focuses on creating a simple program that generates a multiplication table for a user-defined number up to a specified range. The program is designed in C++ and aims to help users quickly calculate and display multiplication tables efficiently.

## Problem

The need for a simple and user-friendly tool to generate multiplication tables arises in educational contexts and for general use. Performing manual calculations for multiplication tables can be time-consuming and prone to errors, especially for larger ranges. This project addresses the problem by providing an automated solution.

## Methodologies Used

The project was implemented using C++, a versatile and widely used programming language. The program follows these steps:  
1. Accept input from the user for the number and the range.  
2. Use a for loop to calculate the product of the number with integers from 1 to the specified range.  
3. Display the results in a formatted manner.  
This approach ensures simplicity, efficiency, and clarity in code implementation.

## Code

#include <iostream>

using namespace std;

int main() {

int number, range;

// Get input from the user

cout << "Enter the number for which you want the multiplication table: ";

cin >> number;

cout << "Enter the range for the multiplication table: ";

cin >> range;

// Generate the multiplication table

cout << "\nMultiplication Table of " << number << ":\n";

for (int i = 1; i <= range; ++i) {

cout << number << " x " << i << " = " << number \* i << endl;

}

return 0;

}

## Results

The program successfully generates multiplication tables for any user-defined number and range. For example, entering the number 5 and a range of 10 produces the following output:  
  
5 x 1 = 5  
5 x 2 = 10  
5 x 3 = 15  
5 x 4 = 20  
5 x 5 = 25  
5 x 6 = 30  
5 x 7 = 35  
5 x 8 = 40  
5 x 9 = 45  
5 x 10 = 50

## References

1. Documentation for the C++ programming language: https://cplusplus.com  
2. Online resources for learning C++: https://www.learncpp.com  
3. Guidance on creating Word documents programmatically.