1. Accept a single digit from the user and display it in words. For example, if the digit entered is 9, display Nine.

#include <stdio.h>

int main() {

int digit;

printf("Enter a single digit (0-9): ");

scanf("%d", &digit); // Read input digit

// Check if input is a valid single digit

if (digit < 0 || digit > 9) {

printf("Invalid input! Please enter a digit between 0 and 9.\n");

} else {

// Convert digit to word using switch

switch (digit) {

case 0: printf("Zero\n"); break;

case 1: printf("One\n"); break;

case 2: printf("Two\n"); break;

case 3: printf("Three\n"); break;

case 4: printf("Four\n"); break;

case 5: printf("Five\n"); break;

case 6: printf("Six\n"); break;

case 7: printf("Seven\n"); break;

case 8: printf("Eight\n"); break;

case 9: printf("Nine\n"); break;

}

}

return 0;

}

2. Write a program, which accepts two integers and an operator as a character (+ - \* /), performs the corresponding operation and displays the result.

#include <stdio.h>

int main() {

int a, b;

char op;

printf("Enter first number: ");

scanf("%d", &a); // First operand

printf("Enter second number: ");

scanf("%d", &b); // Second operand

printf("Enter operator (+, -, \*, /): ");

scanf(" %c", &op); // Operator (note space before %c to consume newline)

switch(op) {

case '+':

printf("Result: %d\n", a + b);

break;

case '-':

printf("Result: %d\n", a - b);

break;

case '\*':

printf("Result: %d\n", a \* b);

break;

case '/':

if (b != 0)

printf("Result: %.2f\n", (float)a / b); // Cast to float for division

else

printf("Error: Division by zero\n");

break;

default:

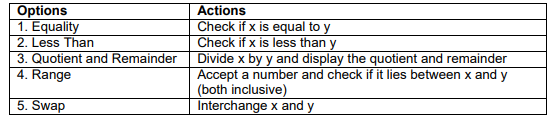
printf("Invalid operator\n");

}

return 0;

}

3. Accept two numbers in variables x and y from the user and perform the following operations Options Actions.



#include <stdio.h>

int main() {

int x, y, choice, num, temp;

printf("Enter value for x: ");

scanf("%d", &x); // First number

printf("Enter value for y: ");

scanf("%d", &y); // Second number

printf("\nSelect Operation:\n");

printf("1. Equality Check\n");

printf("2. Less Than\n");

printf("3. Quotient and Remainder\n");

printf("4. Range Check\n");

printf("5. Swap x and y\n");

printf("Enter your choice (1-5): ");

scanf("%d", &choice); // Read user choice

switch (choice) {

case 1:

if (x == y)

printf("x is equal to y\n");

else

printf("x is not equal to y\n");

break;

case 2:

if (x < y)

printf("x is less than y\n");

else

printf("x is not less than y\n");

break;

case 3:

if (y != 0)

printf("Quotient = %d, Remainder = %d\n", x / y, x % y);

else

printf("Cannot divide by zero\n");

break;

case 4:

printf("Enter a number to check if it lies between x and y: ");

scanf("%d", &num); // Accept number for range check

// Determine min and max between x and y

int min = (x < y) ? x : y;

int max = (x > y) ? x : y;

if (num >= min && num <= max)

printf("%d lies between %d and %d\n", num, x, y);

else

printf("%d does not lie between %d and %d\n", num, x, y);

break;

case 5:

temp = x;

x = y;

y = temp;

printf("After swapping: x = %d, y = %d\n", x, y);

break;

default:

printf("Invalid choice!\n");

}

return 0;

}