**CALCULATOR-TASK**

**EXPLANATION:**

Write a program that adds , subtracts , divides , multiply or gives average.

**INPUT:**

#include <iostream>

#include <conio.h>

#include <stdlib.h>

#include <windows.h>

using namespace std ;

int main ()

{

int i , digits , sum = 0 , num ;

int num\_1 , num\_2 ;

char option , choice ;

bool check = true ;

while ( check )

{

cout << "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*CALCULATOR\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* " << endl << endl ;

cout << "1. SUM " << endl ;

cout << "2. DIFFERENCE " << endl ;

cout << "3. PRODUCT " << endl ;

cout << "4. AVERAGE " << endl ;

cout << "5. DIVISION " << endl ;

cout << "6. EXIT " << endl ;

option = getch () ;

if ( option == '1' || option == '2' || option == '3' || option == '4' || option == '5' || option == '6' )

{

system ("CLS") ;

switch (option)

{

case '1' :

cout << "Please enter number of digits : " ;

while ( ! ( cin >> digits ) || digits < 2 )

{

cout << "Number of digits cannot be less than 2 or a character!!" ;

Sleep ( 2000 ) ;

system ( "CLS" ) ;

cout <<"Please enter number of digits : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

system ( "CLS" ) ;

for ( i = 1 ; i <= digits ; i++ )

{

cout << i << ".Enter number : " ;

while ( ! ( cin >> num ) )

{

system ("CLS") ;

cout << i << ".Enter number : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

sum += num ;

}

cout << "Sum of all " << digits << " digits is " << sum ;

break ;

case '2' :

cout << "Enter first number : " ;

while ( ! ( cin >> num\_1 ) )

{

system ("CLS") ;

cout << "Enter first number : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

cout << "Enter second number : " ;

while ( ! ( cin >> num\_2 ) )

{

system ("CLS") ;

cout << "Enter second number : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

cout << "Difference of 2 numbers is : " << num\_1 - num\_2 ;

break ;

case '3' :

cout << "Please enter number of digits : " ;

while ( ! ( cin >> digits ) || digits < 2 )

{

cout << "Number of digits cannot be less than 2 or a character!!" ;

Sleep ( 2000 ) ;

system ( "CLS" ) ;

cout <<"Please enter number of digits : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

sum = 1 ;

for ( i = 1 ; i <= digits ; i++ )

{

cout << i << ".Enter number : " ;

while ( ! ( cin >> num ) )

{

system ("CLS") ;

cout << i << ".Enter number : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

sum \*= num ;

}

cout << "Product of all " << digits << " digits is " << sum ;

break ;

case '4' :

cout << "Please enter number of digits : " ;

while ( ! ( cin >> digits ) || digits < 2 )

{

cout << "Number of digits cannot be less than 2 or a character!!" ;

Sleep ( 2000 ) ;

system ( "CLS" ) ;

cout <<"Please enter number of digits : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

for ( i = 1 ; i <= digits ; i++ )

{

cout << i << ".Enter number : " ;

while ( ! ( cin >> num ) )

{

system ("CLS") ;

cout << i << ".Enter number : " ;

cin.clear() ;

cin.ignore ( INT\_MAX , '\n' ) ;

}

sum += num ;

}

cout << "Average of all " << digits << " digits is " << ( ( float ) sum / digits ) ;

break ;

case '5' :

cout << "Enter first number : " ;

cin >> num\_1 ;

cout << "Enter second number : " ;

cin >> num\_2 ;

cout << "Division of 2 numbers is : " << ( ( float ) num\_1 / num\_2 ) ;

break ;

case '6' :

check = false ;

return 0 ;

}

Sleep(5000) ;

system ("CLS") ;

while ( choice != 'y' || choice != 'n' )

{

cout << "Do you want to continue (y/n) " ;

choice = getch() ;

if ( choice == 'y' )

{

check = true ;

break ;

}

else if ( choice == 'n' )

{

check = false ;

break ;

}

system ("CLS") ;

}

}

system ("CLS") ;

}

}

**OUTPUT:**

