

A PROJECT REPORT ON

“SIMPLE CALCULATOR”



DEPARTMENT OF COMPUTER APPLICATION

NANDA NATH SAIKIA COLLEGE

TITABAR -785630

ASSAM

SUBMITTED BY:-

KRISTI PRIOM PRIOBHASINI
Roll No. 27220019

PUJA BORA
Roll No. 27220026

POPPY RANI KACHARI
Roll No. 27220024

UNDER THE GUIDANCE OF

Mr. NILOTTAM PODDAR
Computer Faculty
N.N. Saikia College, Titabar

Mr. PRANJAL BORAH
Computer Faculty
N.N. Saikia College, Titabar

ACKNOWLEDGEMENT

We sincerely take the opportunity to express our heartfelt thanks and gratitude to all those who extended their wholehearted co-operations, opinions and gracious hospitality to us in completing the project work successfully.

We would like to acknowledge our gratitude towards our teachers at **Nanda Nath Saikia College** under the egis of **Dibrugarh University** ,for their understanding provision of sound counsel and precious guidance. Finally ,we wish to thank our friends for their support.

KRISTI PRIOM PRIOBHASINI
Roll No. 27220019

PUJA BORA
Roll No. 27220026

POPPY RANI KACHARI
Roll No. 27220024

CERTIFICATE OF EXAMINATION

This is to certify that the project work “**Simple Calculator**” jointly submitted by KRISTI PRIOM PRIOBHASINI , PUJA BORA & POPPY RANI KACHARI for the 2nd semester of **PGDCA** course is a bonafide project work carried out by them under my supervision .

I wish them all success in future.

Thanks,



HOD

Deptt. of Computer Science
N.N. Saikia College

MR. NILOTTAM PODDAR

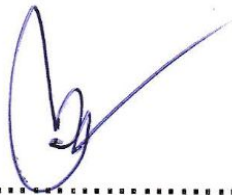
H.O.D

Department of Computer Application

N.N. Saikia College, Titabar

CERTIFICATE OF EXAMINATION

This is to certify that KRISTI PRIOM PRIOBHASINI , PUJA BORA & POPPY RANI KACHARI, 2nd Semester students of PGDCA discipline of **N.N. Saikia College, Titabar** have successfully submitted their project on “**Simple Calculator**” that was completed under the guidance of Mr. Nilottam Poddar and Mr. Pranjal Borah.



.....
Signature of External



.....
Signature of Internal

DECLARATION

We , KRISTI PRIOM PRIOBHASINI , PUJA BORA & POPPY RANI KACHARI hereby declare that the project work entitled “**Simple Calculator**” is an authentic work carried out by us for the partial fulfillment of , 2nd semester of PGDCA of Dibrugarh University. This report has not been anywhere else for the award of any degree or diploma.

KRISTI PRIOM PRIOBHASINI
Roll No. 27220019

PUJA BORA
Roll No. 27220026

POPPY RANI KACHARI
Roll No. 27220024

CONTENTS:-

Introduction

1. Title of the project
2. Project definition
3. Objective
4. Tools used in the project
5. About C

Output

Conclusion

Bibliography

INTRODUCTION

1.1 TITLE OF THE PROJECT:

The project is entitled "CALCULATOR SYSTEM"

1.2 PROJECT DEFINATION:

A calculator is a small electronics device. That perfoms calculations, reqiring manual action for each individual operation.

1.3 OBJECTIVE :

- *I can evaluate Common Logs using a calculator.
- * I can codense log expressings using properties.
- * I can use Change Base Rule.
- * I can expand log expressions using properties.

1.4 TOOLS USED IN THE PROJECT:

Operating System	Windows7
IDE	Turbo C++

ABOUT C:

C is a computer programming language .that means that you can use c to create lists of instructins for computer to follow. C is one of thousands of programming languages currently is use. The c program structure oriented programming language, developed at Bell laboratories in 1970 by Dennis Ritchie.

C programming language feature derived from an earlier language called "B" (Basic combined programming language -BCPL).

ABOUT C:

C is a computer programming language .that means that you can use c to create lists of instructins for computer to follow. C is one of thousands of programming languages currently is use. The c program structure oriented programming language, developed at Bell laboratories in 1970 by Dennis Ritchie.

C programming language feature derived from an earlier language called "B" (Basic combined programming language –BCPL).

```

// Calculator example using C code
#include<stdio.h>
#include<conio.h>
#include<math.h>
#include<stdlib.h>

#define KEY "Enter the calculator Operation you want to do:"

// Function prototype declaration
void addition();
void subtraction();
void multiplication();
void division();
void modulus();
void power();
int factorial();
void calculator_operations();

// Start of Main Program
int main()
{
    int X=1;
    char Calc_oprn;

    // Function call
    calculator_operations();

    while(X)
    {
        printf("\n");
        printf("%s : ", KEY);

        Calc_oprn=getche();

        switch(Calc_oprn)
        {
            case '+': addition();
                    break;

            case '-': subtraction();
                    break;

            case '*': multiplication();
                    break;

            case '/': division();
                    break;
        }
    }
}

```

```

case '?': modulus();
        break;

case '!': factorial();
        break;

case '^': power();
        break;

case 'H':
case 'h': calculator_operations();
        break;

case 'Q':
case 'q': exit(0);
        break;
case 'c':
case 'C': system("cls");
        calculator_operations();
        break;

default : system("cls");

printf("\n*****You have entered unavailable option");
printf("*****\n");
printf("\n*****Please Enter any one of below available ");
printf("options****\n");
        calculator_operations();
    }
}
}

```

//Function Definitions

```

void calculator_operations()
{
    //system("cls"); use system function to clear
    //screen instead of clrscr();
    printf("\n        Welcome to C calculator \n\n");

    printf("***** Press 'Q' or 'q' to quit ");
    printf("the program *****\n");
    printf("***** Press 'H' or 'h' to display ");
    printf("below options *****\n\n");
    printf("Enter 'C' or 'c' to clear the screen and");
    printf(" display available option \n\n");

    printf("Enter + symbol for Addition \n");
}

```

```

scanf("%d", &a);
printf("Please enter second number : ");
scanf("%d", &b);
d=a/b;
printf("\nDivision of entered numbers=%d\n",d);
}

```

```

void modulus()
{
int a, b, d=0;
printf("\nPlease enter first number : ");
scanf("%d", &a);
printf("Please enter second number : ");
scanf("%d", &b);
d=a%b;
printf("\nModulus of entered numbers = %d\n",d);
}

```

```

void power()
{
double a,num, p;
printf("\nEnter two numbers to find the power \n");
printf("number: ");
scanf("%lf",&a);

printf("power : ");
scanf("%lf",&num);

p=pow(a,num);

printf("\n%lf to the power %lf = %lf\n",a,num,p);
}

```

```

int factorial()
{
int i,fact=1,num;

printf("\nEnter a number to find factorial : ");
scanf("%d",&num);

if (num<0)
{
printf("\nPlease enter a positive number to");
printf(" find factorial and try again. \n");
printf("\nFactorial can't be found for negative");
printf(" values. It can be only positive or 0 \n");
return 1;
}
}

```

```
printf("Enter - symbol for Subtraction \n");
printf("Enter * symbol for Multiplication \n");
printf("Enter / symbol for Division \n");
printf("Enter ? symbol for Modulus\n");
printf("Enter ^ symbol for Power \n");
printf("Enter ! symbol for Factorial \n\n");
}
```

```
void addition()
```

```
{
    int n, total=0, k=0, number;
    printf("\nEnter the number of elements you want to add:");
    scanf("%d",&n);
    printf("Please enter %d numbers one by one: \n",n);
    while(k<n)
    {
        scanf("%d",&number);
        total=total+number;
        k=k+1;
    }
    printf("Sum of %d numbers = %d \n",n,total);
}
```

```
void subtraction()
```

```
{
    int a, b, c = 0;
    printf("\nPlease enter first number :");
    scanf("%d", &a);
    printf("Please enter second number :");
    scanf("%d", &b);
    c = a - b;
    printf("\n%d - %d = %d\n", a, b, c);
}
```

```
void multiplication()
```

```
{
    int a, b, mul=0;
    printf("\nPlease enter first numb :");
    scanf("%d", &a);
    printf("Please enter second number:");
    scanf("%d", &b);
    mul=a*b;
    printf("\nMultiplication of entered numbers = %d\n",mul);
}
```

```
void division()
```

```
{
    int a, b, d=0;
    printf("\nPlease enter first number :"),
```

```
for(i=1;i<=num;i++)  
fact=fact*i;  
printf("\n");  
printf("Factorial of entered number %d is:%d\n",num,fact);  
return 0;  
}
```


BIBLIOGRAPHY

- * www.google.com
- * Jeyapoovan, T; "Programming with C"
- * Other resources from net and friends.

CONCLUSION

Calculator system is a simple project. Here in this project used for it can evaluate common logs using a calculator. Calculators can do only addition, subtraction, multiplication, and division. It can use change base rule.

With very limited knowledge and on a very limited on a very limited period of time, it is really not very easy to work out complete and perfect software. Though we have tried our best to improve the quality of software, there may be some limitations and drawbacks in it. Even though calculators can do the basic operations instantly, students should not be using it all the time. When a student is always dependant on a calculator for solving problems of additions, subtractions, multiplications, and division, it may make them incapable of solving these basic operations manually.