EXP NO:-2A

SIMPLE CALCULATOR

ALGORITHM

Step 1: Start

Step 2: Declare and define functions add, subtract, multiply and divide   
Step 3: Declare variables num1, num2, ans and c.

Step 4: Read values num1, num2 and arithmetic operation.

Step 5: Read arithmetic operation.  
 Case ‘+’ – call “add” function which returns (ans=num1+num2)

Case ‘-’ – call “subtract” function which returns (ans=num1-num2)

Case ‘\*’ – call “multiply” function which returns (ans=num1\*num2)

Case ‘/’ – call “divide” function which return (ans=num1/num2)

Step 6: Display result

Step 7: Stop

**CODE:**

#include<stdio.h>

float add(float a,float b) //Defining the addition of two numbers Function

{

return(a+b);

}

float sub(float a,float b) //Defining the subtraction of two numbers Function

{

return(a-b);

}

float mul(float a,float b) //Defining the multiplication of two numbers Function

{

return(a\*b);

}

float div(float a,float b) //Defining the Division of two numbers Function

{

return((float)a/b);

}

void display(char choice,float a,float b,float ans) //Defining the displaying the answer Function

{

printf("%.3f %c %.3f is : %.2f",a,choice,b,ans);

}

int main() //main function

{

float a,b,ans;

unsigned char choice;

printf("Enter the value of a and b :"); //taking two values from user

scanf("%f%f",&a,&b);

pass :

printf("Enter the operation'+';'-';'/' or '\*' to be performed on %.3f and %.3f :",a,b); //asking which operation to be done on those two numbers

getchar();

choice = getchar();

switch(choice) //using switch to choose the operation correctly

{

case'+' :

ans=add(a,b);

break;

case'-' :

ans=sub(a,b);

break;

case'\*' :

ans=mul(a,b);

break;

case'/' :

ans=div(a,b);

break;

default :

printf("The choice entered is INCORRECT\nPlease enter the correct choice\n"); //printing error message for wrong option.

}

printf("The answer is : %.2f",ans);

printf("\n");

goto pass;

}

**OUTPUT:-**

