```c
/*
Thomas Gibbons
Profit.c
Lab 1
Problem 3
*/
#include <stdio.h>
#include <math.h>

int main(void)
{
    /*Data*/
    float num1,num2, result;
    int error=1;
    char op;

    /*Loop while there's an error*/
    while(error==1)
    {
        error=0;

        /*Input*/
        printf("\nValue 1: ");
        scanf("%f",&num1);
        printf("\nOperator: ");
        scanf(" %c",&op);
        printf("\nValue 2: ");
        scanf("%f",&num2);

        /*Choose operation based on input op*/
        switch(op) {

            /*add*/
          case '+' :
             result=num1+num2;
             break;
             /*subtract*/
          case '-' :
             result=num1-num2;
             break;
             /*multiply*/
          case '*' :
             result=num1*num2;
             break;
          case '/' :
          {
                /*divide*/
             if(num2!=0)
                result=num1/num2;
                /*error check*/
             else
                 {
                 error=1;
```

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                    printf("\Can't divide by zero\nTry again\n" );
                    }

            }
               break;
            default :
            {
                  /*error message and restart loop*/
               printf("\nInvalid operator\nTry again\n" );
               error=1;
            }
         }
      }
      /*output*/
      printf("%f %c %f = %f\n",num1,op,num2,result);
      return 0;
}
```