```c
#include <stdio.h>

int main ()
{
    int add1,add2,sum,choice;

    float sub1,sub2,subt;

    double mult1,mult2,prod,div1,div2,quo;

    do
    {
    printf("Press 1 for addition\nPress 2 for subtraction\nPress 3 for multiplication\nPress 4 for division\n");

    scanf("%d",&choice);

    if (choice!=1 && choice!=2 && choice!=3 && choice!=4)

        printf("Please enter a valid number\n\n");

    } while(choice!=1 && choice!=2 && choice!=3 && choice!=4);

    if (choice==1)

    {

        printf("Enter the two numbers:\n");

        scanf("%d %d",&add1,&add2);

        sum = add1 + add2;

        printf("Sum of %d and %d is %d",add1,add2,sum);

    }

    else if (choice==2)

    {

        printf("Enter the two numbers:\n");

        scanf("%f %f",&sub1,&sub2);

        subt = sub1 - sub2;

        printf("Difference between %.2f and %.2f is %.2f",sub1,sub2,subt);

    }

    else if (choice==3)

    {

        printf("Enter the two numbers:\n");
```

```c
        scanf("%lf %lf",&mult1,&mult2);

        prod = mult1 * mult2;

        printf("Product of %.4lf and %.4lf is %.4lf",mult1,mult2,prod);

    }

    else if (choice==4)

    {

        printf("Enter the two numbers:\n");

        scanf("%lf %lf",&div1,&div2);

        quo = div1 / div2;

        printf("Quotient of %.4lf and %.4lf is %.4lf",div1,div2,quo);

    }

    return 0;

}
```