

Ex No: 4
Date:

Use of Variable in Expression

Aim:

To write a C program to use the variables in expressions and their evaluation.

Algorithm:

- i). Start the program.
- ii). Get values for a and b.
- iii). Calculate $(a+b)^2$ as $((a*a)+(2*a*b)+(b*b))$.
- iv). Calculate $(a-b)^2$ as $((a*a)-(2*a*b)+(b*b))$.
- v). Display the results.
- vi). Stop the program.

Program:

```
#include<stdio.h>
#include<conio.h>

void main()
{
    int a,b,res1,res2;
    clrscr();
    printf("\nEnter A Value: ");
    scanf("%d",&a);
    printf("\nEnter B Value: ");
    scanf("%d",&b);
    res1 = ((a*a)+(2*a*b)+(b*b));
    res2 = ((a*a)-(2*a*b)+(b*b));
    printf("\n(a+b)2 = %d",res1);
    printf("\n(a-b)2 = %d",res2);
    getch();
}
```

Result:

Thus the C program to use the variables in expressions and their evaluation is executed successfully.