

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

```
int main()
```

```
{
```

```
    int a, b, ch; char c;
```

```
    do {
```

```
        printf("1 - Addition\n 2 - Subtraction\n 3 - Multiplication\n 4 - Division\n 5 - Greatest\n 6 - Smallest\n 7 - Equality\n 8 - Inequality\n 9 - Average\n 10 - Powers\n");
```

```
printf("Enter the numbers
```

```
printf("Enter the choice\n");
```

```
scanf("%d", &ch);
```

```
printf("Enter your numbers\n");
```

```
scanf("%d %d", &a, &b);
```

```
switch(ch)
```

```
{
```

```
    case 1:
```

```
        printf("Sum is %d\n", (a+b));
```

```
        break;
```

```
    case 2:
```

```
        printf("%d - %d is %d\n", a, b, (a-b),  
               %d - %d is %d\n", b, a, (b-a));
```

```
        break;
```

```
    case 3:
```

```
        printf("Product is %d\n", (a*b));
```

```
        break;
```

```
    case 4:
```

```
        printf("%d / %d is %f\n", a, b, (float)a/b,  
               %d / %d is %f\n", b, a, (float)b/a);
```



Case 5:

```
printf  
if (a > b) %d  
printf("a is largest\n", a);  
else if (b > a)  
printf("%d is largest\n", b);  
else  
printf("Both are equal\n");  
break;
```

Case 6:

```
if (a < b)  
printf("%d is smallest\n", a);  
else if (b < a)  
printf("%d is smallest\n", b);  
else printf("Both are equal\n");  
break;
```

Case 7:

```
if (a == b)  
printf("%d and %d are equal\n");  
else printf("They are not equal\n");  
break;
```

Case 8:

```
if (a != b)  
printf("They are unequal\n");  
else printf("They are not unequal\n");  
break;
```

Case 9:

```
printf("Average of %d and %d is  
%f\n", a, b, (float)(a+b)/2);  
break;
```

Case 10:

```
printf("%d ^ %d is %f and  
%d ^ %d is %f\n", a, b, (pow(a, b)),  
b, a, (pow(b, a)));  
break;
```



~~def~~ default:

```
printf("Wrong choice ! \n");  
break ;
```

```
}
```

```
printf("Do you want to stop continue ?  
Y/n N/n for no \n");
```

```
scanf("%c", &c);
```

```
while(c != 'n' || c != 'N');  
return 0;
```