

```

// switch statement
#include <stdio.h>
int main()
{
    char a;
    puts("Your choice (1,2,3): ");
    scanf("%c",&a);
    switch(a)
    {
        case '1':
            puts("Excellent choice");
            break;
        case '2':
            puts("this is the most common choice");
            break;
        case '3':
            puts("I questions your judgment");
            break;
        default:
            puts("That is not a valid choice");

    }
    return 0;
}
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
#include <stdio.h>
int main()
{
    int x;
    puts("Your choice (0,1): ");
    scanf("%d",&x);
    switch(x)
    {
        case 0:
            printf("A,");
            break;
        case 1:
            printf("B, ");
            break;
        default:
            printf("C");

    }
    return 0;
}
/// no break
#include <stdio.h>
int main()
{
    int x;

```

```

    puts("Your choice (0,1): ");
    scanf("%d",&x);
    switch(x)
    {
    case 0:
        printf("A,");
    case 1:
        printf("B, ");
        break;
    default:
        printf("C");

    }
    return 0;
}
///// calculator
#include <stdio.h>
int main()
{
    float x,y;
    char op;
    puts("Enter two numbers and operators: (x op y) ");
    scanf("%f %c %f",&x,&op,&y);
    switch(op)
    {
    case '+':
        printf("sum = %f",x+y);
        break;
    case '-':
        printf("sub = %f",x-y);
        break;
    case '*':
        printf("Mul = %f",x*y);
        break;
    case '/':
        printf("sub = %f",x/y);
        break;
    default:
        printf("Illegal operator");
    }
    return 0;
}
/// repeated cases
#include <stdio.h>
int main()
{
    float x,y;
    char op;
    puts("Enter two numbers and operators: (x op y) ");
    scanf("%f %c %f",&x,&op,&y);

```

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switch(op)
{
case '+':
    printf("sum = %f",x+y);
    break;
case '-':
    printf("sub = %f",x-y);
    break;
case '*':
case 'x':
    printf("Mul = %f",x*y);
    break;
case '/':
    printf("sub = %f",x/y);
    break;
default:
    printf("Illegal operator");
}
return 0;
}

```

///// case without break

```

#include <stdio.h>
int main()
{
    int x;
    puts("Enter a number : (1,2,3,4) ");
    scanf("%d",&x);
    switch(x)
    {
    case 1: printf("*");
    case 2: printf("***");
    case 3: printf("****");
    case 4: printf("*****");
    }
    return 0;
}

```

/////

// Area - Circum

```

#include <stdio.h>

```

```

#include <math.h>

```

```

#define PI 3.14159

```

```

int main()

```

```

{
    float r;
    char op;
    puts("for area use \' A");
    puts("for Circumference use \' C");
    scanf("%c",&op);
    puts("Circle Radius: ");
}

```

```

scanf("%f",&r);
switch(op)
{
case 'A':
case 'a':
    printf("area = %f",PI*pow(r,2));
    break;
case 'C':
case 'c':
    printf("circum = %f",2*PI*r);
    break;
default:
    printf("unknown option chosen");
}
return 0;
}
/// ternary operator // conditional operator
// maximum number
#include <stdio.h>
#include <math.h>
int main()
{
    float x,y,max;
    puts("Enter two numbers to get the maximum: (x y) ");
    scanf("%f %f",&x,&y);
    max = x>y? x: y;
    printf("Maximum number: %f",max);
    return 0;
}
////////////////////////////////////
// conditional operator
// print max >
// print min <
#include <stdio.h>
#include <math.h>
int main()
{
    float x,y;
    puts("Enter two numbers to get the maximum: (x y) ");
    scanf("%f %f",&x,&y);
    printf("%f %c %f",x, (x>y? '>': '<'), y);
    return 0;
}

```