

do while Repetition Statement

```
/*  
    File name: lecture5_1.c  
    counter-controlled (do while) repetition  
*/  
#include <stdio.h>  
int main () {  
    int counter = 1;  
    do {  
        printf("%d ", counter);  
    } while( ++counter <= 10 );  
    printf("\n");  
    return 0;  
}
```

break and continue Statement in loop

```
/* File name: lecture5_2.c
   break and continue statements in for loop */
#include <stdio.h>
int main () {
    int i, ii;
    printf("Break statement in first loop\n");
    for( i = 1; i <= 10; i = i + 1 ){
        if( i == 5 ) break;
        printf("%d ", i);
    }
    printf("\nLoop is broken at i = %d\n\n", i);
    for( ii = 1; ii <= 10; ii = ii + 1 ){
        if( i == 5 ) continue;
        printf("%d ", ii);
    }
    printf("\n"); return 0;
}
```

switch-case Statement (1)

```
/*
    File name: lecture5_3.c
    Learning simple switch-case in c-language
*/
#include <stdio.h>
int main () {
    char x;
    float y1, y2;
    printf("Enter operator either + or - or * or divide : ");
    scanf("%c", &x);
    printf("Enter two operands (real numbers): ");
    scanf("%f%f", &y1, &y2);
    switch( x ){
        case '+':
            printf("%.3f + %.3f = %.3f\n", y1, y2, y1 + y2);
            break;
        case '-':
            printf("%.3f + %.3f = %.3f\n", y1, y2, y1 - y2);
            break;
        case '*':
            printf("%.3f * %.3f = %.3f\n", y1, y2, y1 * y2);
            break;
        case '/':
            printf("%.3f / %.3f = %.3f\n", y1, y2, y1 / y2);
            break;
        default:
            printf("Invalid operator\n");
    }
}
```

switch-case Statement (1)

```
case '-' :  
    printf("%.3f + %.3f = %.3f\n", y1, y2, y1 - y2);  
    break;  
case '*' :  
    printf("%.3f + %.3f = %.3f\n", y1, y2, y1 * y2);  
    break;  
case '/' :  
    printf("%.3f + %.3f = %.3f\n", y1, y2, y1 / y2);  
    break;  
default :  
    printf("Error! operator is not correct\n");  
    break;  
}  
return 0;  
}
```

switch-case Statement (2)

```
/*
    File name: lecture5_4.c
    Learning simple switch-case in c-language
*/
#include <stdio.h>
int main () {
    int grade, aCount, bCount, cCount, dCount, eCount, fCount;
    aCount = bCount = cCount = dCount = eCount = fCount=0;
    printf("Enter the letter grades.\n");
    printf("Enter EOF character to end the input.\n");
    while( (grade = getchar()) != EOF ) { /* press Ctrl+D for EOF */
        switch( grade ){
            case 'A' :
            case 'a' :
                aCount++;
                break;
            case 'B' :
            case 'b' :
```

switch-case Statement (2)

```
case 'b' :  
    bCount++;  
    break;  
case 'C' :  
case 'c' :  
    cCount++;  
    break;  
case 'D' :  
case 'd' :  
    dCount++;  
    break;  
case 'E' :  
case 'e' :  
    eCount++;  
    break;  
case 'F' :  
case 'f' :  
    fCount++;  
    break;  
case '\n' :
```

```
case '\n' :  
case '\t' :  
case ' ' :  
    break;  
default :  
    printf("Incorrect grade entered.");  
    printf("Enter new grade.\n");  
    break;  
}  
}  
printf("\nTotals for each letter grade are:\n" );  
printf("A: %d\n", aCount );  
printf("B: %d\n", bCount );  
printf("C: %d\n", cCount );  
printf("D: %d\n", dCount );  
printf("E: %d\n", eCount );  
printf("F: %d\n", fCount );  
return 0;  
}
```