

# Loop - Examples

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- 1 Repeat
  - Loop

```
#include <stdio.h>

void method_1(void);
void method_2(void);
void method_3(void);
void method_4(void);
void method_5(void);
void method_6(void);
void method_7(void);
void method_8(void);
void method_9(void);
void method_10(void);

void main(void){

    method_1();
    method_2();
    method_3();
    method_4();
    method_5();
    method_6();
    method_7();
    method_8();
    method_9();
    method_10();

}
```

```
void method_1(void) {
    int i;
    int Sum;

    Sum = 1+2+3+4+5+6+7+8+9+10;

    printf("M1: Sum = %d \n", Sum);
}
```

```
void method_2(void) {
    int i;
    int Sum;

    Sum = 0;
    Sum = Sum + 1;
    Sum = Sum + 2;
    Sum = Sum + 3;
    Sum = Sum + 4;
    Sum = Sum + 5;
    Sum = Sum + 6;
    Sum = Sum + 7;
    Sum = Sum + 8;
    Sum = Sum + 9;
    Sum = Sum + 10;

    printf("M2: Sum = %d \n", Sum);
}
```

```
void method_3(void) {
    int i;
    int Sum;

        Sum = 0;
    i=1; Sum = Sum + i;
    i=2; Sum = Sum + i;
    i=3; Sum = Sum + i;
    i=4; Sum = Sum + i;
    i=5; Sum = Sum + i;
    i=6; Sum = Sum + i;
    i=7; Sum = Sum + i;
    i=8; Sum = Sum + i;
    i=9; Sum = Sum + i;
    i=10; Sum = Sum + i;

    printf("M3: Sum = %d \n", Sum);
}
```

```
void method_4(void) {
    int i;
    int Sum;

    Sum = 0;        i=1;
    Sum = Sum + i; i=2;
    Sum = Sum + i; i=3;
    Sum = Sum + i; i=4;
    Sum = Sum + i; i=5;
    Sum = Sum + i; i=6;
    Sum = Sum + i; i=7;
    Sum = Sum + i; i=8;
    Sum = Sum + i; i=9;
    Sum = Sum + i; i=10;
    Sum = Sum + i; i=11;

    printf("M4: Sum = %d \n", Sum);
}
```

# Ex4

```
void method_5(void) {
    int i;
    int Sum;

    Sum = 0;        i = 1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;
    Sum = Sum + i; i=i+1;

    printf("M5: Sum = %d \n", Sum);
}
```

```
void method_6(void) {
    int i;
    int Sum;

    Sum = 0;        i=1;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;
    Sum = Sum + i; i++;

    printf("M6: Sum = %d \n", Sum);
}
```

```
void method_7(void) {
    int i;
    int Sum;

    Sum = 0;          i=1;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;
    Sum = Sum + i; ++i;

    printf("M7: Sum = %d \n", Sum);
}
```

```
void method_8(void) {
    int i;
    int Sum;

    Sum = 0;
    for (i=1; i<=10; ++i) {
        Sum = Sum + i;
    }

    printf("M8: Sum = %d \n", Sum);
}
```

# Ex6 (1)

```
void method_9(void) {
    int i;
    int Sum;

    Sum = 0;          i=1; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);
    Sum = Sum + i; ++i; printf("Sum=%d i=%d \n", Sum, i);

    printf("M9: Sum = %d \n", Sum);
}
```



## Ex6 (2)

```
void method_10(void) {
    int i;
    int Sum;

    Sum = 0;
    for (i=1; i<=10; ++i) {
        Sum = Sum + i; printf("Sum=%d i=%d \n", Sum, i);
    }

    printf("M10: Sum = %d \n", Sum);
}
```

```
#include <stdio.h>

main (void)
{
    int a, b, c;
    float mean;

    printf("Enter a: ");
    scanf("%d", &a);

    switch (a) {
        case 0:
        case 1:
        case 2:
        case 3:
        case 4: printf("0 <= a < 5 \n");
                break;
        case 5:
        case 6:
        case 7:
        case 8:
        case 9: printf("5 <= a < 10 \n");
                break;
        default: printf("a < 0 or a >= 10 \n");
                 break;
    }

    printf("a = %d\n", a);
}
```