

: :

[III. - ()]

A. [for]

1 100 1 for : (100)

```
#include <stdio.h>

int main() {
    int count = 0;
    for (int i = 1; i <= 100; i+=2) {
        printf("%d\n", i);
        count++;
    }
    printf("Count: %d\n", count);
    return 0;
}
```

1 100 2 for : (50)

```
#include <stdio.h>

int main() {
    int count = 0;
    for (int i = 1; i <= 100; i+=2) {
        printf("%d\n", i);
        count++;
    }
    printf("Count: %d\n", count);
    return 0;
}
```

100 1 1 for : (100)

```
#include <stdio.h>

int main() {
    int count = 0;
    for (int i = 100; i >= 1; i--) {
        printf("%d\n", i);
        count++;
    }
    printf("Count: %d\n", count);
    return 0;
}
```

100 1 5 for : (20)

: :

```
#include <stdio.h>

int main() {
    int count = 0;
    for (int i = 100; i >= 1; i-=5) {
        printf("%d\n", i);
        count++;
    }
    printf("Count: %d\n", count);
    return 0;
}
```

10 50 3 for : (14)

```
#include <stdio.h>

int main() {
    int count = 0;
    for (int i = 10; i <= 50; i+=3) {
        printf("%d\n", i);
        count++;
    }
    printf("Count: %d\n", count);
    return 0;
}
```

50 10 3 for : (14)

```
#include <stdio.h>

int main() {
    int count = 0;
    for (int i = 50; i >= 10; i-=3) {
        printf("%d\n", i);
        count++;
    }
    printf("Count: %d\n", count);
    return 0;
}
```

: :

B. [while : for while]

1 100 1 while

```
#include <stdio.h>

int main() {
    int count = 0;
    int i = 1;

    while (i <= 100) {
        printf("%d\n", i);
        count++;
        i += 2;
    }

    printf("Count: %d\n", count);
    return 0;
}
```

1 100 2 while

```
#include <stdio.h>

int main() {
    int count = 0;
    int i = 1;

    while (i <= 100) {
        printf("%d\n", i);
        count++;
        i += 2;
    }

    printf("Count: %d\n", count);
    return 0;
}
```

100 1 1 while

```
#include <stdio.h>

int main() {
    int count = 0;
    int i = 100;

    while (i >= 1) {
        printf("%d\n", i);
        count++;
        i--;
    }
}
```

: :

```
}

printf("Count: %d\n", count);
return 0;
}
```

100 1 5 while

```
#include <stdio.h>

int main() {
    int count = 0;
    int i = 100;

    while (i >= 1) {
        printf("%d\n", i);
        count++;
        i -= 5;
    }

    printf("Count: %d\n", count);
    return 0;
}
```

10 50 3 while

```
#include <stdio.h>

int main() {
    int count = 0;
    int i = 10;

    while (i <= 50) {
        printf("%d\n", i);
        count++;
        i += 3;
    }

    printf("Count: %d\n", count);
    return 0;
}
```

50 10 3 while

```
#include <stdio.h>

int main() {
    int count = 0;
    int i = 50;
```

: :

```
while (i >= 10) {  
    printf("%d\n", i);  
    count++;  
    i -= 3;  
}  
  
printf("Count: %d\n", count);  
return 0;  
}
```

: :

1. 1- loop_ex01.c

•

```
#include <stdio.h>
int main() {
    int n;
    printf("Input Num : ");
    scanf("%d", &n);

    for (int i = n+1; i < n+5; i++)
    {
        printf("%d ", i);
    }
}
```

Input Num : 1
2 3 4 5

2. 2- loop_ex02.c

•

```
#include <stdio.h>

int main() {
    int wow, sum = 0;
    printf("      : ");
    scanf("%d", &wow);

    printf("1~%d      3      \n", wow);

    for(int i=1; i < wow+1; i++) {
        if (i%3 == 0) {
            printf("%d ", i);
            sum += i;
        }
    }

    printf("\n\n1~%d      3      \n%d",
wow, sum);

    return 0;
}
```

: 20
1~20 3
3 6 9 12 15 18

1~20 3
63

: :

3. 3-loop_ex03.c

•

<pre>#include <stdio.h> int main() { int n; printf(" : "); scanf("%d", &n); int count = n; printf("14 \n\n"); while (count!=0) { count--; if (count%2 == 0) continue; printf("%d ", count); } }</pre>	<pre> : 14 14 13 11 9 7 5 3 1</pre>

4. 4-loop_ex04.c

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<pre>#include <stdio.h> int main() { int n; printf(" : "); scanf("%d", &n); if(n < 1) { printf(" !!!"); return 1; } int count = 0;</pre>	<pre> : 11 1 2 3 4 5 6 7 8 9 10 11</pre>

: :

<pre>do { count++; printf("%d ", count); }while (count != n); return 0; }</pre>	
--	--

5. 5- loop_ex05.c

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<pre>#include <stdio.h> int main() { int n; printf(" : "); scanf("%d", &n); for (int i = 0; i < n; i++) { if (i%2!=0) { printf("-"); } else { printf("+"); } } }</pre>	<pre> : 7 +-+--+</pre>

6. 6-loop_ex06.c

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<pre>#include <stdio.h> int main() { int n; printf(" : ");</pre>	<pre> : 8 A B C A B C A B</pre>

: :

<pre>scanf("%d", &n); for (int i = 0; i < n; i++) { if (i % 3 == 0) printf("A "); else if (i % 3 == 1) printf("B "); else printf("C "); } }</pre>	
---	--

7. 7-loop_ex07.c

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<pre>#include <stdio.h> int main() { int n; printf(" : "); scanf("%d", &n); int count = 0; while (count != n) { count++; printf("%d", count%10); } }</pre>	<pre> : 25 1234567890123456789012345</pre>

8. 8-loop_ex08.c

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<pre>#include <stdio.h> int main() { int n; printf(" (0) : "); scanf("%d", &n);</pre>	<pre> (0) : -13 9 8 7 6 5 4 3 2 1 0 8 7</pre>

: :

<pre>int i = n+1; int count = 9; while (i != 0) { printf("%d ", count); if (count == 0) { count = 9; } count--; i++; }</pre>	
--	--

9. 9-loop_ex09.c

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<pre>#include <stdio.h> int main() { int n; printf(" ? "); scanf("%d", &n); int arr[n]; int sum=0; for (int i=0; i<n; i++) { printf(" %d : ", i+1); scanf("%d", &arr[i]); sum+=arr[i]; } printf(" : %d\n", sum); printf(" : %.2lf\n", (double)sum/n); }</pre>	<pre> ? 6 1 : 65 2 : 23 3 : 47 4 : 9 5 : 153 6 : 777 : 1074 : 179.00</pre>

10. 10-loop_ex10.c

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<pre>#include <stdio.h></pre>	<pre>Input Num() : 5 1~5 : 15</pre>

: :

<pre>int main() { int n; printf("Input Num() : "); scanf("%d", &n); int sum=0,multiply=1; for (int i = 1; i<n+1; i++) { sum+=i; multiply*=i; } printf("1~5 : %d\n", sum); printf("1~5 : %d", multiply); }</pre>	<pre>1~5 : 120</pre>
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