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\* \* \* \* \*

#while loop

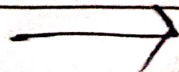
```
int i = 1, j = 1;
while (i <= 5)
{
    while (j <= i)
    {
        printf("x");
        j++;
    }
    printf("\n");
    i++;
}
```

#for loop

```
for (int i = 1; i <= 5; i++)
{
    for (int j = 1; j <= i; j++)
    {
        printf("x");
    }
    printf("\n");
    j = 1;
}
```

while (cond)

{



do

{

while (cond)

1  
 2 3  
 4 5 6  
 7 8 9 10  
 11 12 13 14 15

#while loop-

```

int i=1, j=1, ctr=1;
while (i <= 5)
{
    while (j <= i)
    {
printf("%d ", ctr);
        printf("%d ", ctr);
        ctr++;
        j++;
    }
    j=1;
    i++;
    printf("\n");
}
  
```

#for loop

```

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



prime/composite.

```
int num, ctr = 0, i = 1;
```

```
while (i <= num)
```

```
printf ("Enter a number");
```

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

```
while (i <= num)
```

```
{
```

```
    if (num % i == 0)
```

```
    {
```

```
        ctr++;
```

```
    }
```

```
    i++;
```

```
}
```

```
if (ctr > 2)
```

```
{
```

```
    printf ("\n composite");
```

```
}
```

```
else
```

```
{
```

```
    printf ("\n prime");
```

```
}
```

```
}
```



odd / even

```
int num;
```

```
printf ("Enter a no");
```

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

```
if ( num % 2 == 0 )
```

```
{
```

```
    printf ("no is even");
```

```
}
```

```
else
```

```
{
```

```
    printf ("no is odd");
```

```
}
```

```
}
```



Greatest among 3 numbers.

```
int man a, b, c;  
printf ("Enter 3 numbers");  
scanf ("%d %d %d", &a, &b, &c);
```

```
if (a > b && a > c)  
{  
    printf ("%d is greatest", a);  
}
```

```
else if (b > a && b > c)  
{  
    printf ("%d is greatest", b);  
}
```

```
else  
{  
    printf ("%d is greatest", c);  
}
```



palindrome.

```
int num, rev=0, n, temp=0;
```

```
printf ("Enter a number");
```

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

```
n = num;
```

```
while (n > 0)
```

```
{
```

```
    temp = n % 10;
```

```
    rev = (rev * 10) + temp;
```

```
    n = n / 10;
```

```
}
```

```
if (rev == num)
```

```
{
```

```
    printf ("no is palindrome");
```

```
}
```

```
else
```

```
{
```

```
    printf ("no is not palindrome");
```

```
}
```