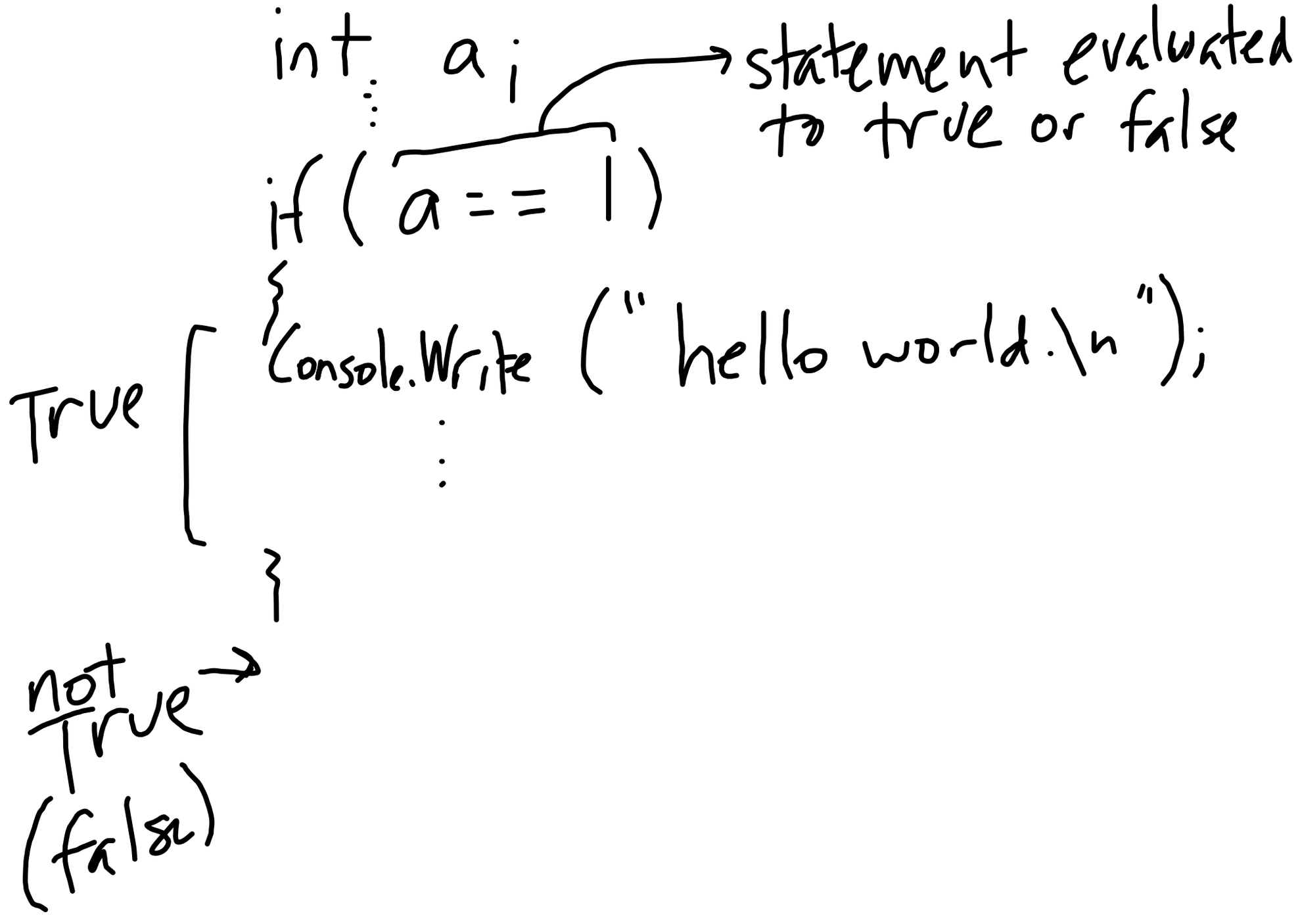
Branching (Decision-making)

if ( )

→ int, char, float, long, double, etc.

switch ( )

→ int, char, long, bool, String


int a;
statement evaluated to true or false
if (a == 1)
{
Console.Write ("hello world.\n");
True
}
not True
(false)

Comparison operators

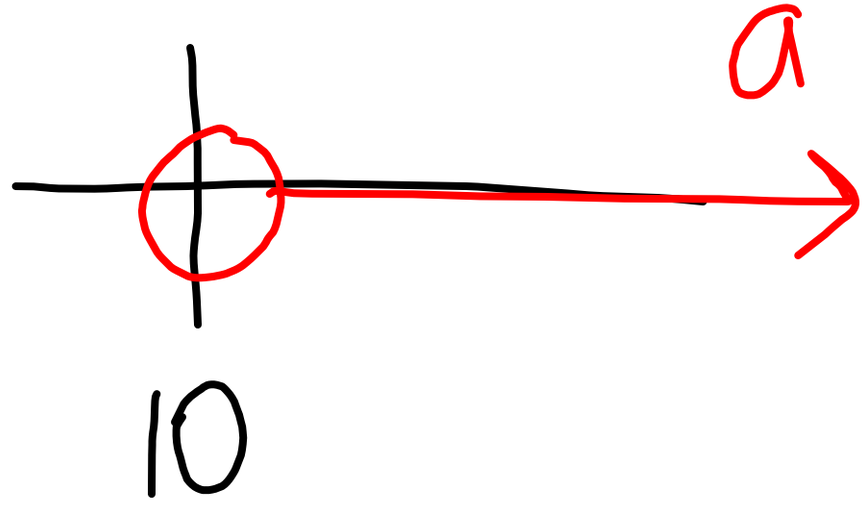
==		equal to
<		less than
>		greater than
≤	<=	less than or equal to
≥	>=	greater than or equal to
≠	!=	not equal to

do not use

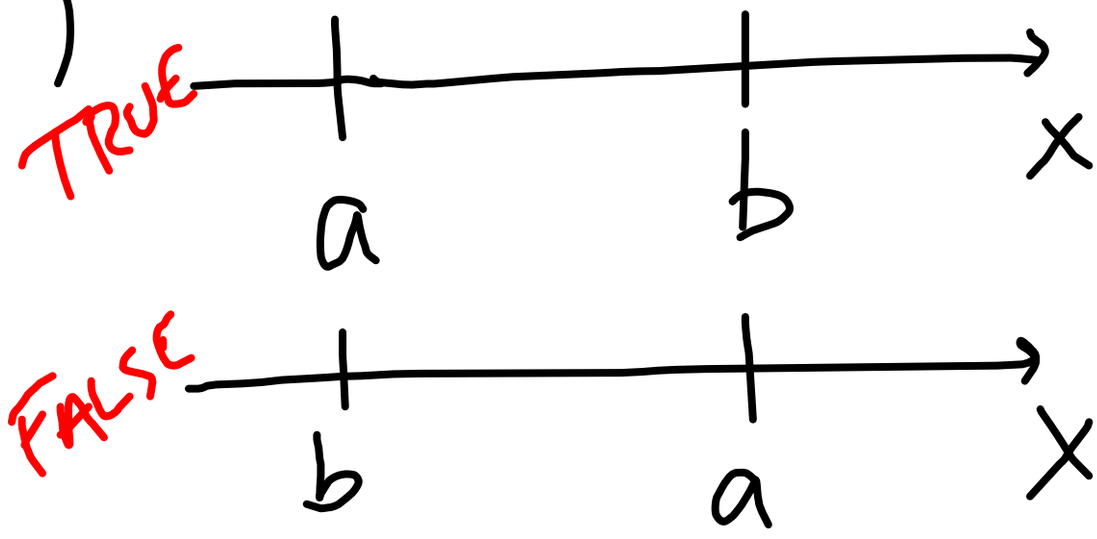
$a < 0$

$a > 10$

$10 < a$

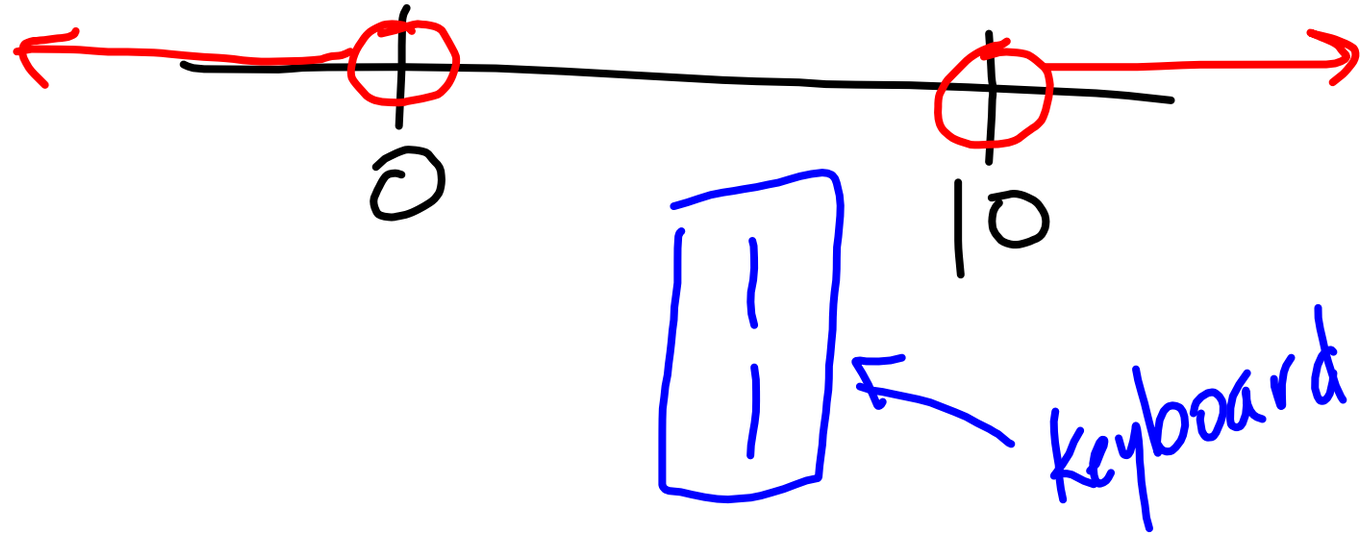


```
if ( a < b )
```




```
if ( a<0  ||  10<a)
{


}
```



```
int choice;
if( choice < 1  ||  1 < choice)
{
Console.Write("incorrect input\n");
;
```

```
if ( a == b )
{
Console.Write("a equals b\n");

}
else
{
Console.Write("a is not equal to b\n");

}
```

```
if( a < b )
{
Console.Write("a is less than b.\n");
}
else if( b < a )
{
Console.Write("b is less than a.\n");
}
else
{
Console.Write("a equals b.\n");
}
```

```
if (          )
{

}
else  if (          )
{

}
else  if (          )
{

}
else
{

}
```

```
char a, b;
if(a==b)

if(a=='<')
if(a=='q')
if(a=='1')
```

```
float a, b;
if(a==b)

if(a==3.0)
if(a==4.5)
```

do not check equality with float, double