



Java Dili



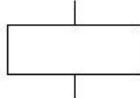
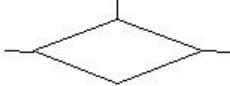
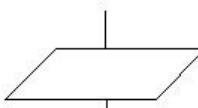
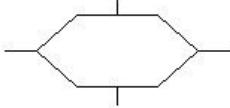
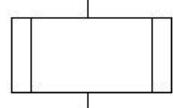
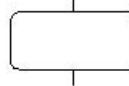
Algoritmalar

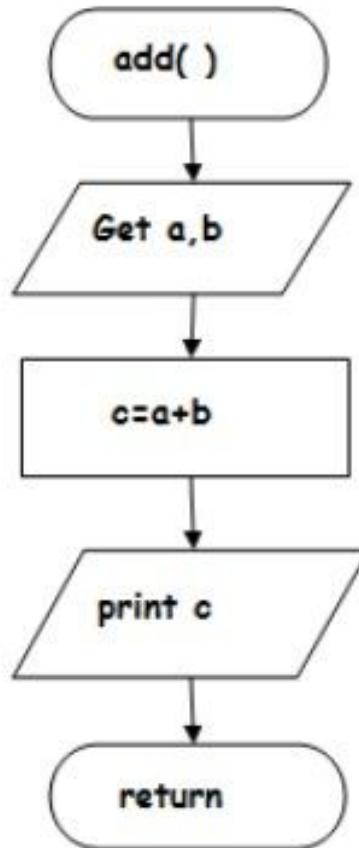
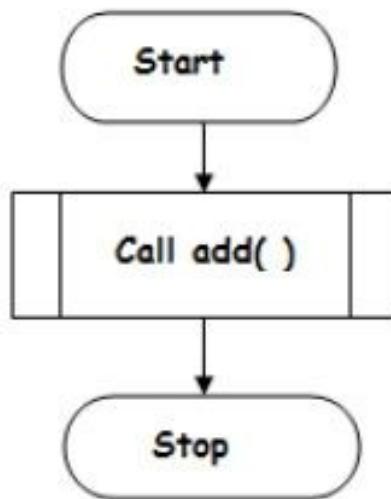
> Belirli bir problemin çözülmesi için izlenmesi gereken basit adımlar saptanmasına algoritma denir.

Örnek:

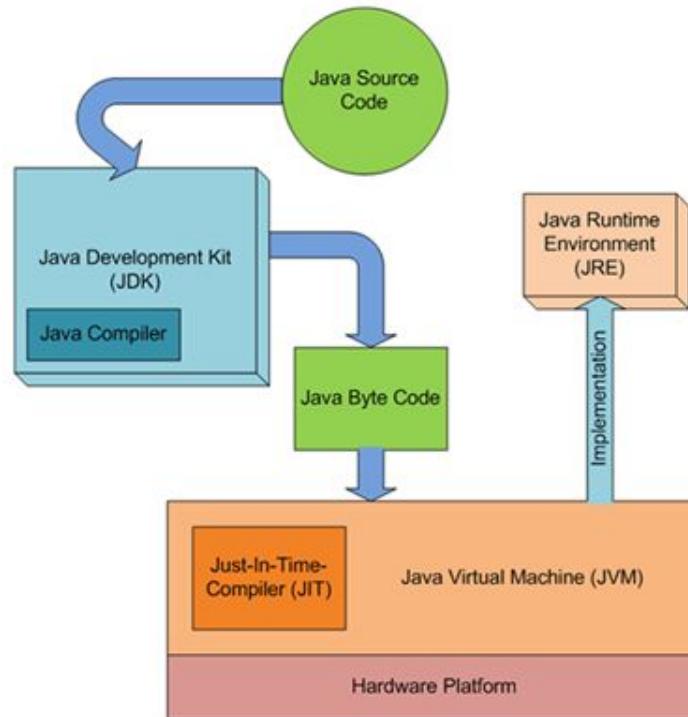
Okula gitmenin algoritması

1. Zamanında uyan
2. Üstünü değiştir
3. Kahvaltı et
4. Trafik durumunu öğren
5. Eğer trafik varsa metroya bin, yoksa otobüse bin
6. Okula ulaş

Notation in the block diagram	Explanation
	A process, calculation, or sequence of actions
	Selection, condition checking
	Input/output
	Loop, repeated repetition
	Subroutines, functions, procedures
	Begin, end



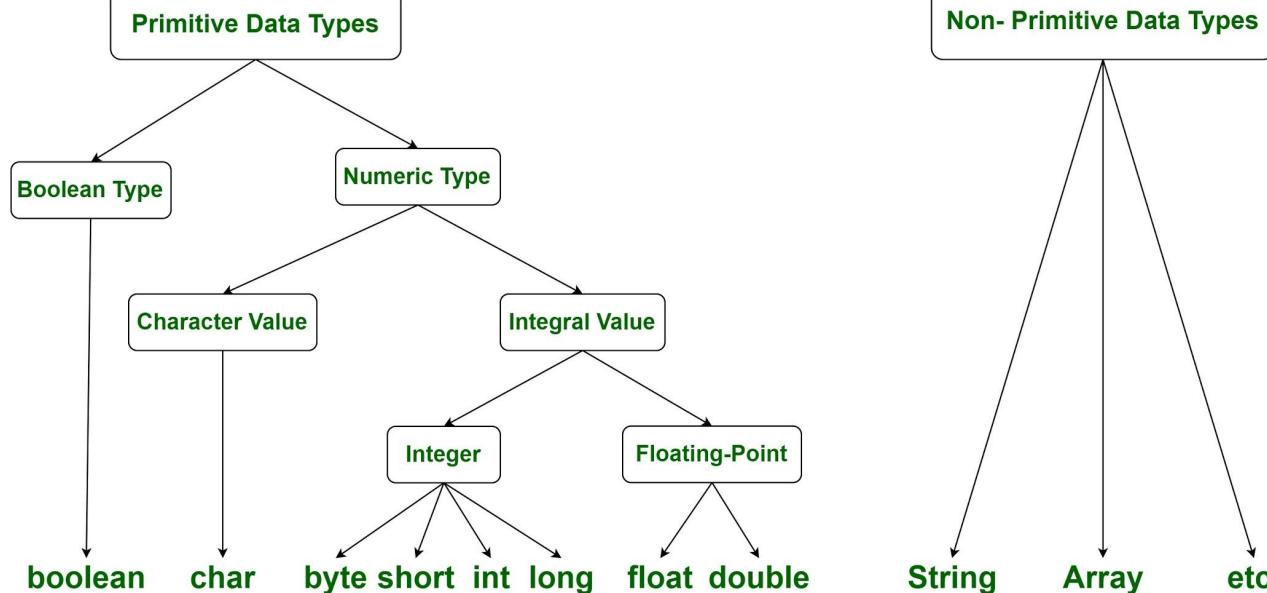
Java Kodu Nasıl Çalışır?



Variables

Variable Type	Values	Example Output
bool	true or false	true
int	[-128, 127]	1, 4, -5
double	[$1.7976931348623157 \times 10^{308}$, $4.9406564584124654 \times 10^{-324}$]	3.4, 5.0 , -4.123
String	Any text between starting and ending in double quotes	Cat

Data Types in Java



Operators

Addition	+	7+3	10	<code>+ =</code>
Subtraction	-	8-3	5	<code>--</code>
Multiplication	*	4*5	20	<code>* =</code>
Division	/	9/4	2	<code>/ =</code>
Modulo	%	5%4	1	<code>% =</code>
assignment operator	=	x = 5 x = x+1		

Relational Operators

Greater than	>	$7>3$	true
Less than	<	$8<3$	false
Greater than or equal	\geq	$5\geq 5$	true
Less than or Equal	\leq	$9\leq 4$	false
equal to	\equiv	$5\equiv 4$	false
Not equal to	\neq	$5\neq 4$	true

Logical Operators

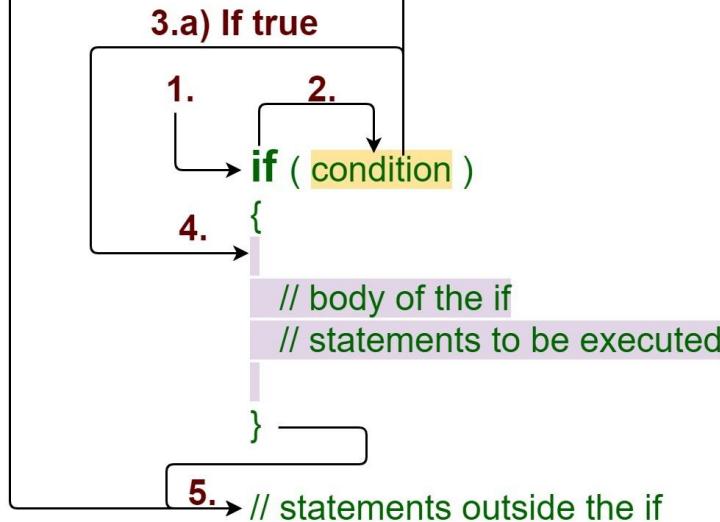
			A=true B=true	A=true/false B=false/true	A=false B=false
And	&&	A&&B	true	false	false
Or		A B	true	true	false

Conditionals

If statement:

If statement

3.b) If false



Conditionals

Else:

```
if (condition1)
{
    // do this if condition is true
    // condition1 statements
    // then exit if/else if
}
else if (condition2)
{
    // do this if condition2 is true
    // condition2 statements
    // then exit if/else if
}
else if (condition3)
{
    // do this if condition3 is true
    // condition3 statements
    // then exit if/else if
}
else // if no if condition was true
{
    // do this if no if conditions were true
    // trailing else statements
}
```

Only executed if condition1,
condition2, and condition3
are all false

Looping Statements

For loop:

For Loop

3.b) If false

3.a) If true

1.

2.

6.

4.

```
for ( initialization ; condition ; updation )
```

{

// body of the loop

// statements to be executed

}

5.

7.

→ // statements outside the loop

Looping Statements

While loop:

While Loop

3.b) If false

3.a) If true

1. → **while** (condition)
2. ↓
4. {

// body of the loop
// statements to be executed

5. → updation
} ←

6.

7. → // statements outside the loop

