



LOGICAL STATEMENTS AND OPERATORS

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LOGICAL STATEMENTS (1)

A. If statement, `if(P) Q;`

When P condition is true then execute Q

```
ex: if(3>2) printf( "3 is bigger than 2" );  
     if(3<2) printf( "3 is smaller than 2" );
```

B. If statement, `if(!P) Q;`

When P condition is not true then execute Q

C. P has logical operator to check. Ex: `3>2`, `2 >3`, `2==3`

D. Q is an execution statement

LOGICAL STATEMENTS (2)

A. else statement, `if(P) Q else R;`

When P condition is not true then execute Q

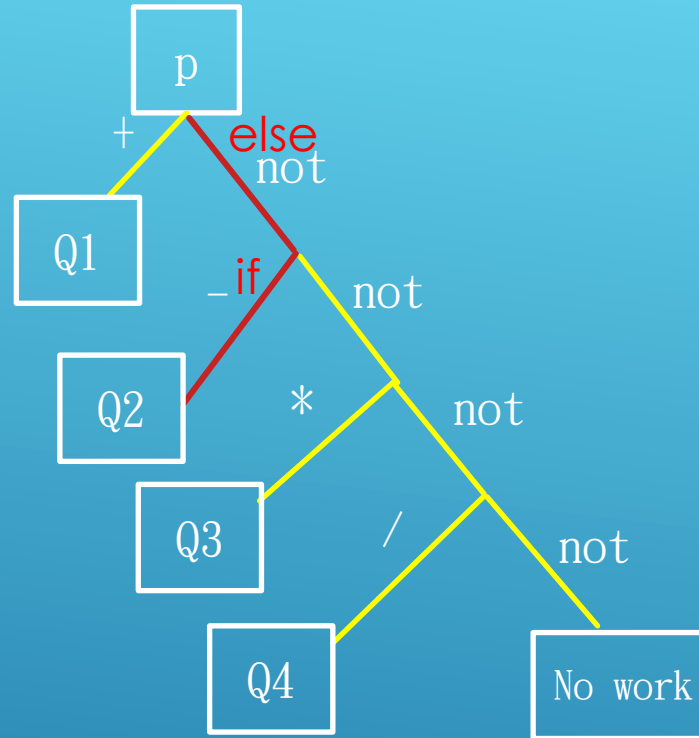
B. else statement, `if(!P) else Q;`

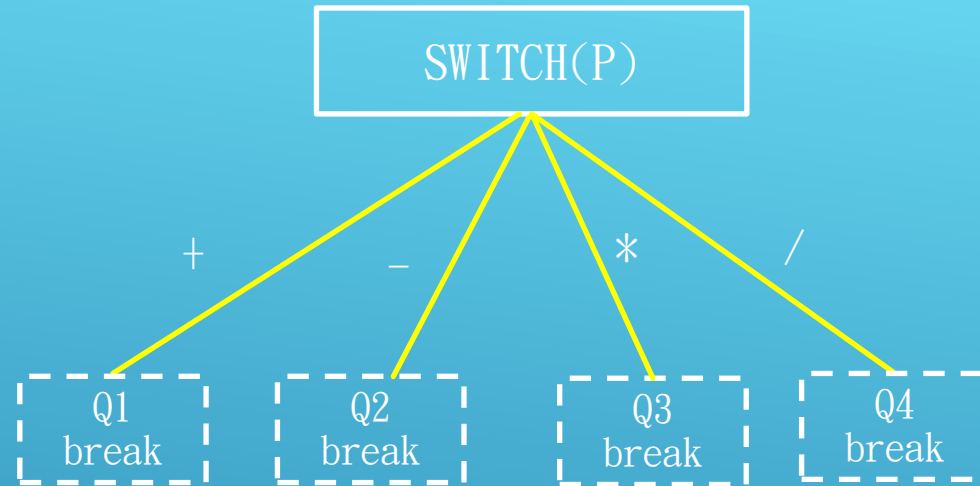
When P condition is true then execute Q

C. P has logical operator to check. Ex: $3 > 2$, $2 > 3$, $2 == 3$

D. Q is an execution statement


```
if(p=='+') Q1;  
else if(p=='-') Q2;  
else if(p=='*') Q3;  
else if(p=='/') Q4;  
else printf("No work");
```





```
Switch(p){  
Case '+': Q1; break;  
Case '-': Q2; break;  
Case '*': Q3; break;  
Case '/': Q4; break;  
Default: printf("No work");  
}
```

AND operator(&&)	P1(T)	P1(F)
P2(T)	TT	TF
P2(F)	FT	FF

If(p1&&P2) Q1; Q1 will be executed with one red conditions

or operator()	P1(T)	P1(F)
P2(T)	TT	TF
P2(F)	FT	FF

If($p1 \mid \mid p2$) Q1; Q1 will be executed with three red conditions