Switch case (conditional statement)

```
char ch = 'B';        // variable / argu
switch (ch) {
    case A:           // constant value / literals
        Break;
    case B:
        {
        }
        Break;
    case C:
        Break;
    default
        Break;
}
```

int

```
int i = 10;           // Switch Board
switch (i) {
    LED // case 2:
        i = i * i;
        break;
    wifi // case 3:
        i = i + i;
        Break;
    T.V // case 4:
        i = i - 2
        break;
    fan // case 10:
        sysо(10);     // fan On
        break;
}
```

2 → i*i
3 → i+i
4 → i-i → Syso (10)
10 → fan on

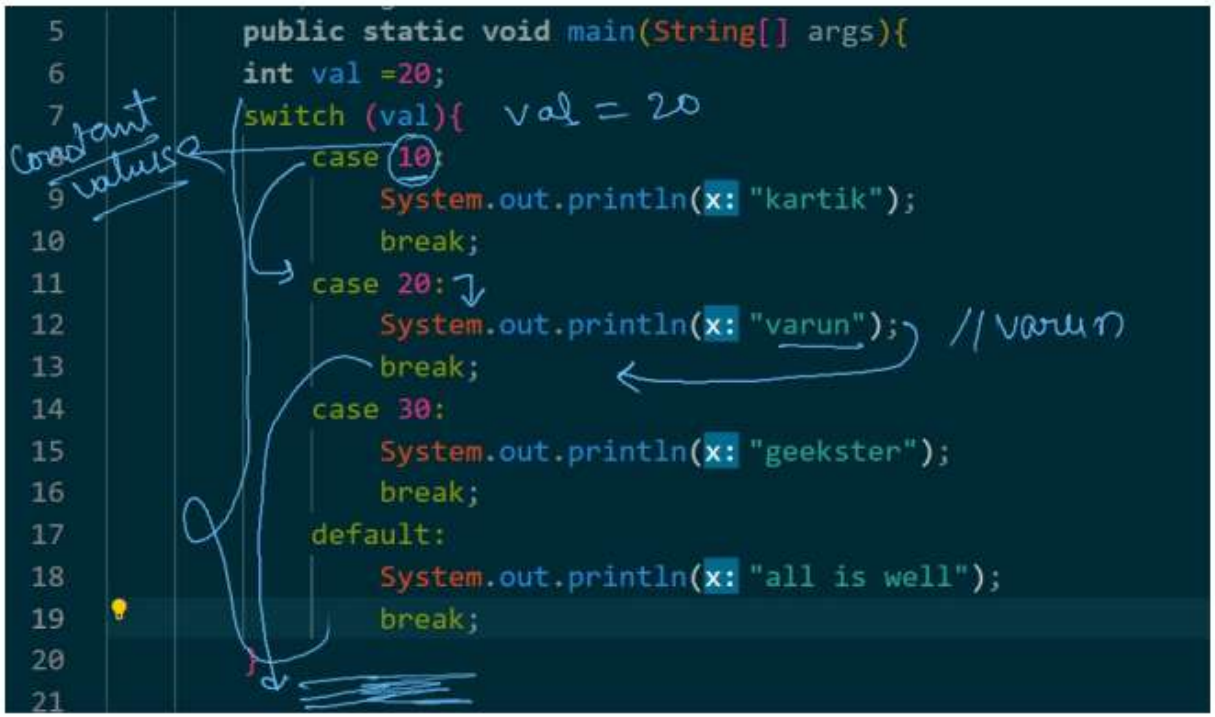
switch (Payment) {

case UPI :

Cou Card :

default :

} (COD)



gwtp

Break is optional in Switch statement.

No duplicate case label is allowed.

Default statement is optional.

case is also optional in switch statement.

default statement position is not fixed;

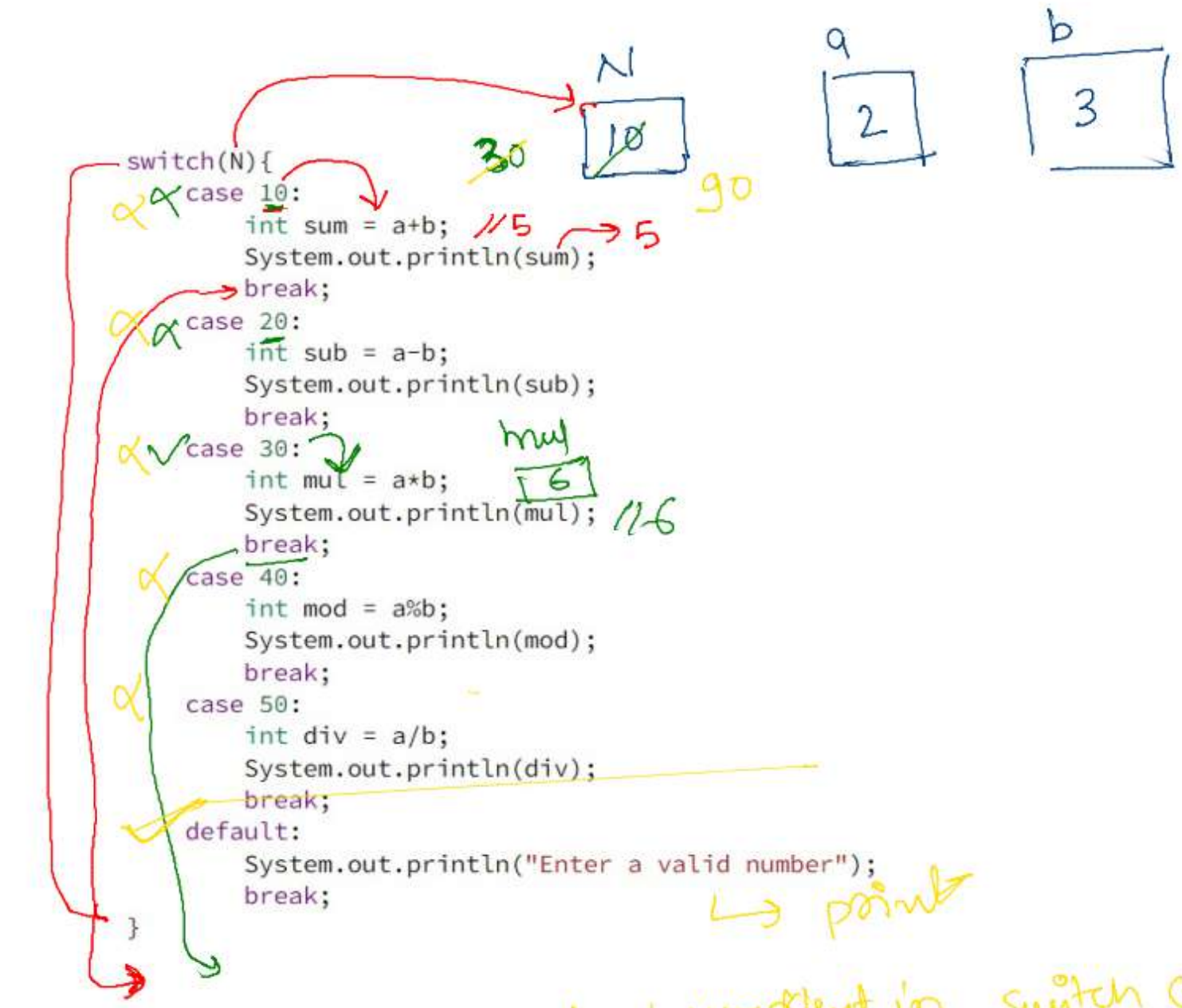
```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    char ch = scn.next().charAt(0);

    Switch(ch){
        case 'A':
            System.out.println("Excellent!");
            break;
        case 'B':
            System.out.println("Well done!");
            break;
        case 'C':
            System.out.println("You passed!");
            break;
        case 'F':
            System.out.println("Better luck next time!");
            break;
        default:
            System.out.println("Invalid grade");
            break;
    }
```

ch

F

/Better luck next time



* ordering is not important in switch case

Character

char (ch) = scn.next().charAt(0);

Switch(ch){

case 'A' → char

case 'B'

case 'C'

case 'f'

default

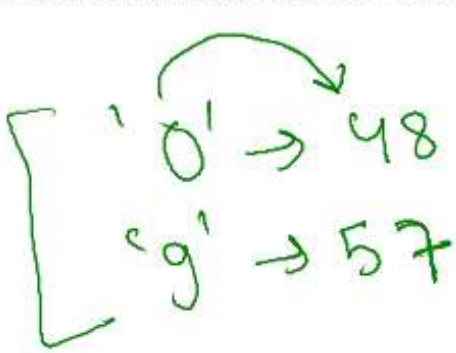
}

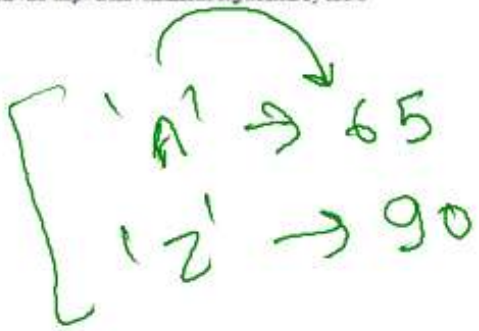
→ char is denoted inside ' '

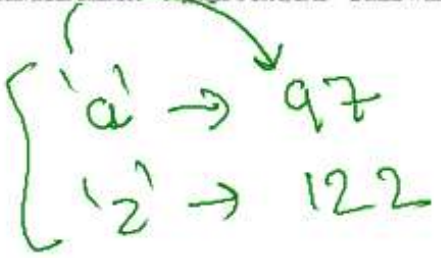
↳ ASCII value

'a' → ascii

0	00000000	000	00	NUL	32	00100000	040	20	SP	64	01000000	100	40	@	96	01100000	140	60	`	
1	00000001	001	01	SOH	33	00100001	041	21	!	65	01000001	101	41	A	97	01100001	141	61	a	
2	00000010	002	02	STX	34	00100010	042	22	"	66	01000010	102	42	B	98	01100010	142	62	b	
3	00000011	003	03	ETX	35	00100011	043	23	#	67	01000011	103	43	C	99	01100011	143	63	c	
4	00000100	004	04	EOT	36	00100100	044	24	$	68	01000100	104	44	D	100	01100100	144	64	d	
5	00000101	005	05	ENQ	37	00100101	045	25	%	69	01000101	105	45	E	101	01100101	145	65	e	
6	00000110	006	06	ACK	38	00100110	046	26	&	70	01000110	106	46	F	102	01100110	146	66	f	
7	00000111	007	07	BEL	39	00100111	047	27	'	71	01000111	107	47	G	103	01100111	147	67	g	
8	00001000	010	08	BS	40	00101000	050	28	(	72	01001000	110	48	H	104	01101000	150	68	h	
9	00001001	011	09	HT	41	00101001	051	29	)	73	01001001	111	49	I	105	01101001	151	69	i	
10	00001010	012	0A	LF	42	00101010	052	2A	*	74	01001010	112	4A	J	106	01101010	152	6A	j	
11	00001011	013	0B	VT	43	00101011	053	2B	+	75	01001011	113	4B	K	107	01101011	153	6B	k	
12	00001100	014	0C	FF	44	00101100	054	2C	,	76	01001100	114	4C	L	108	01101100	154	6C	l	
13	00001101	015	0D	CR	45	00101101	055	2D	-	77	01001101	115	4D	M	109	01101101	155	6D	m	
14	00001110	016	0E	SO	46	00101110	056	2E	.	78	01001110	116	4E	N	110	01101110	156	6E	n	
15	00001111	017	0F	SI	47	00101111	057	2F	/	79	01001111	117	4F	O	111	01101111	157	6F	o	
16	00010000	020	10	DLE	48	00110000	060	30	0	80	01010000	120	50	P	112	01110000	160	70	p	
17	00010001	021	11	DC1	49	00110001	061	31	1	81	01010001	121	51	Q	113	01110001	161	71	q	
18	00010010	022	12	DC2	50	00110010	062	32	2	82	01010010	122	52	R	114	01110010	162	72	r	
19	00010011	023	13	DC3	51	00110011	063	33	3	83	01010011	123	53	S	115	01110011	163	73	s	
20	00010100	024	14	DC4	52	00110100	064	34	4	84	01010100	124	54	T	116	01110100	164	74	t	
21	00010101	025	15	NAK	53	00110101	065	35	5	85	01010101	125	55	U	117	01110101	165	75	u	
22	00010110	026	16	SYN	54	00110110	066	36	6	86	01010110	126	56	V	118	01110110	166	76	v	
23	00010111	027	17	ETB	55	00110111	067	37	7	87	01010111	127	57	W	119	01110111	167	77	w	
24	00011000	030	18	CAN	56	00111000	070	38	8	88	01011000	130	58	X	120	01111000	170	78	x	
25	00011001	031	19	EM	57	00111001	071	39	9	89	01011001	131	59	Y	121	01111001	171	79	y	
26	00011010	032	1A	SUB	58	00111010	072	3A	:	90	01011010	132	5A	Z	122	01111010	172	7A	z	
27	00011011	033	1B	ESC	59	00111011	073	3B	;	91	01011011	133	5B	[	123	01111011	173	7B	{	
28	00011100	034	1C	FS	60	00111100	074	3C	<	92	01011100	134	5C	\	124	01111100	174	7C	|	
29	00011101	035	1D	GS	61	00111101	075	3D	=	93	01011101	135	5D	]	125	01111101	175	7D	}	
30	00011110	036	1E	RS	62	00111110	076	3E	>	94	01011110	136	5E	^	126	01111110	176	7E	~	
31	00011111	037	1F	US	63	00111111	077	3F	?	95	01011111	137	5F	_	127	01111111	177	7F	DEL	







'5' = '0' + 5

= 48 + 5

'5' = 53

'A' + 3 ⇒ D

↓

65 + 3 = 68

'k' − 32 → 'K'

'A' → 'a'

65 → 97

↳ 32

'K' + 32 → 'k'

k ⇒ 103

char ch = ?

↳ upperCase || lowerCase → True

```
if ( ch >= 'a' && ch <= 'z' ){
        Syso ("LowerCase");
}
else if ( ch >= 'A' && ch <= 'Z' ){
        Syso ("UpperCase");
}
else {
        Syso ("Invalid input");
}
```

97 127

char int

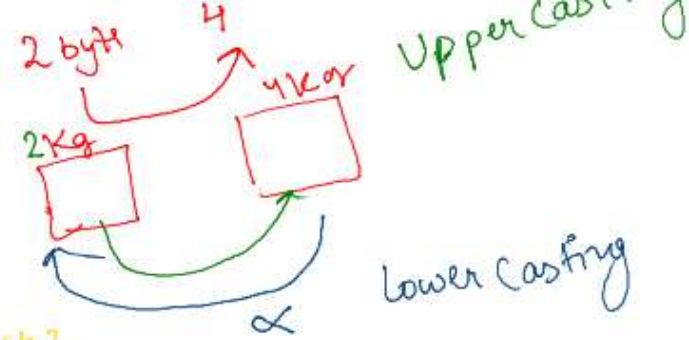
Example

```
Char ch = 'a';
int val = ch;
Syso(val); // 97
char ch2 = val  //error
Syso(ch2);
```

ch [a]

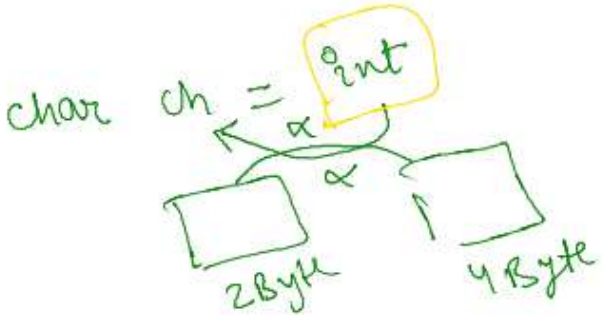
val [97]

ch2 [ ]



type casting

```
char ch2 = (char)val; // no error
```



Char ch = (char) int

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    char ch = scn.next().charAt(0);
    if(ch =='M' || ch =='m'){
        System.out.println("You are a male");
    }else if(ch =='F' || ch =='f'){
        System.out.println("You are a female");
    }else{
        System.out.println("Type again");
    }
    /* Enter your code here. Read input from STDIN. Print output
}
```