

```
public static void main(String args[])
{
    int a=10,b=15;
    if(a>b)
    {
        System.out.print("a ");
    }
    else
    {
        System.out.print("b ");
    }
    System.out.print("is greater");
}
```

a/b is greater

```
public static void main(String args[])
{
    int x = 5;
    if (x < 6)
        System.out.print("Hello ");
    if(x == 5){
        System.out.print("Hi ");
    }
    else{
        System.out.print("Hey ");
    }
}
```

6/8 Hello Hi

never define conditions in else.

```
int a=50;
if(a>10)
{
    System.out.print("Coding");
}
else(a>20)
{
    System.out.print("Ninjas");
}
```

compile error

```
public static void main (String[] args) {
    int a=10;
    a+=++a-5/3+6*a;
    System.out.print(a);
}
```

```
public static void main(String[] args) {
    int x = 15;
    if(x <= 15){
        System.out.print("Inside if ");
    }else if(x == 15){
        System.out.print("Inside else if ");
    }
    System.out.println(x);
}
```

o/p Inside of 15

*a-- 11 → a
11-- 10*

```
public static void main (String[] args) {
    int a=10,b=50;
    a++;
    --b;
    int c=a--+b--;
    System.out.print(++c);
}
```

Which line(s) of the following code would give an error:

```
public static void main (String[] args) {
    int a=10,b=20;
    System.out.println(a+++-b); //line 1
    System.out.println(a--++b); //line 2
    System.out.println(a++-++b); //line 3
    System.out.println(a+++b); //line 4
}
```

Handwritten notes: (1, 2) are circled. Below: a-- ++b, a-- t(++b)

while loop

Syntax

initialize

```
while (condition) {  
    // statement
```

upgrade
}

```
for (int i = 1; i <= 10; i++) {  
    Syso(i);  
}
```

```
int i = 1;  
while (i <= 10) {  
    Syso(i);  
}  
i++;
```

```
int i = 1;  
while(i <= 10){  
    System.out.println(i);  
    i++;  
}
```

HW_Print series AAA,bb,CCC,dd,EEE,ff till 26 lines

```
for(int i = 'A'; i <= 'Z'; i++){  
    if(i % 2 != 0){ // odd  
        System.out.print((char) (i));  
        System.out.print((char) (i));  
        System.out.print((char) (i));  
    }  
    else{  
        int ch = Character.toLowerCase(i);  
        System.out.print((char) (ch));  
        System.out.print((char) (ch));  
    }  
    System.out.println();  
}
```

'int i = 'A' → 65
65 % 2 != 0 → T
(char) 65 → 'A' 'AAA'

66 % 2 != 0 → F
'bb'

'int ch = (66) → 'B' → 'b'
↓
98

67 % 2 != 0 → T
'CCC'
'dd'

68 → 100

68 % 2 != 0 → F

HW_Print Vowels in the string

vowels - 'a', 'e', 'i', 'o', 'u'

String str = "Jatin" → 5 0-4
 ↑↑↑↑↑

str.length

[a
i]
 str = "Sunanda" → 7 0-6
 ↑↑↑↑↑↑↑

[u
a
a]

~~0~~ ~~1~~ ~~2~~ 3 4
 J a t i n

str.length() → 5 0-5 < 5

< str.length() - 1

< str.length()

≤ length() - 1

ch = charAt(i)

```
Scanner s = new Scanner(System.in);
String str = s.nextLine();
```

```
for(int i = 0; i < str.length(); i++){
    char ch = str.charAt(i);
    if(ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u'){
        System.out.println(ch);
    }
}
```

~~Xi~~ ~~Xi~~ ~~Xi~~ ~~Xi~~ ~~Xi~~ ~~Xi~~
 0 1 2 3 4 5
 M a n s i
 len → 5

String str = "Mansi"

[a] → T
[i] → T

ch = charAt(3) → S

ch = charAt(i)

charAt(0) → M → F

ch = charAt(4) → F

ch = charAt(1) → a

'a' == 'a' → T

'i' == 'i' → T

ch = charAt(2) → n → F

5 < 5 F

str.length()

0 1 2 3 4 5 6 7 8 9 10 11
'Rahul Sharma' → 12

→ 12

12