

Java Concept 68

Methods	Can be	Can Not be
abstract methods	---	static
non abstract methods	static	---

```
1 abstract class Calculate
2 {
3     //abstract method
4     abstract int sum(int a, int b);
5     //non - abstract method
6     int add(int a, int b){ return (a+b);}
7 }
```

```
1 //Making abstract and non abstract method static // Error
2 abstract class Calculate
3 {
4     static abstract int sum(int a ,int b); //Error
5     static int add(int a, int b){return (a+b);} // No Error
6 }
7 class JavaConcept
8 {
9     public static void main(String[] args)
10    {
11
12    }
13 }
```

Complie Error- error: illegal combination of modifiers: abstract and static
static abstract int sum(int a ,int b);

run:
BUILD SUCCESSFUL (total time: 0 seconds)

```
1 //Making abstract and non abstract method static
2 // Compile time Error //Runtime Error
3 abstract class Calculate
4 {
5     static abstract int sum(int a ,int b); //Error
6     static int add(int a, int b){return (a+b);} // No Error
7 }
8 class JavaConcept extends Calculate
9 {
10     static int sum(int a, int b){return (a+b);}
11     public static void main(String[] args)
12     {
13         System.out.println(JavaConcept.sum(10, 10));
14     }
15 }
```

Compile time error :- illegal combination of modifiers: abstract and static
static abstract int sum(int a ,int b); //Error

Runtime error : - sum(int,int) in javaconcept.JavaConcept cannot override sum(int,int)
in javaconcept.Calculate overriding method is static