

Garbage collection:

If you declare a variable, or use a statement, or some if condition/for variables that you are not going to use it in your program, then java will collect those unused objects and remove it from the memory so that those memory spaces can be reclaimed. This is called garbage collection. Garbage collection was done by java automatically and it can happen after each period, the time will be decided by java.

Stack is a data structure like an array which can held multiple values. However, stack uses last in first out or LIFO. That means the very last item you will insert into the stack will appear as the first item and the first item will appear as the last item.

A Stack has a push and pop method. By using push method, you can insert an item into the stack. By using a pop method, you can remove an item from the stack.

```
int stk[]=new stk[10]// Here stk is a stack of 10 integers

int tos;// we are going items tos into our stack stk[]

void push(int item){

stk[++tos]= item// here we are inserting tos as items into our stack stk[]

}

int pop(){

return stk[tos--] // here we are removing tos items from our stack stk[]

}

}
```

Write a java program which will have a class named large. The large class will have an array as a member, a constructor which will assign the values to the member, two methods; first method will print out the elements that are divisible by 5 and 10 from the array member. Second method will print out the largest and 2nd largest items from the array member. Create object of the large class inside the main class and call the method.

```
class large{
    int a[];
    large(int a[]){
        this.a=a;
    }
    void print() {
        for(int i=0; i<a.length; i++) {
            if(a[i]%5==0&a[i]%10==0) {
                System.out.println(a[i]);
            }
        }
    }
}
```

```

    }

}

void l() {
    int large=a[0];
    int secondlarge=a[1];
    for(int i=0; i<a.length; i++) {
        if(a[i]>large) {
            secondlarge=large; // here we are
moving the large item to the second position since
a[i] >large
            large=a[i]; // here a[i] will be the
largest item
        }
        else if(a[i]>secondlarge) {
            secondlarge=a[i]; // if the value of
a[i] is greater than secondlarge item, then that will
be the second large.
        }
    }
    System.out.println("large item is "+large);
    System.out.println("Second large item is
"+secondlarge);
}

}

public class large_secondlarge {

    public static void main(String[] args) {
        large l1= new large(new int[]
{43,23,12,11,55,21,17,19,42,24,10,20}); // TODO Auto-
generated method stub
        l1.print();
        l1.l();
    }
}

```

}