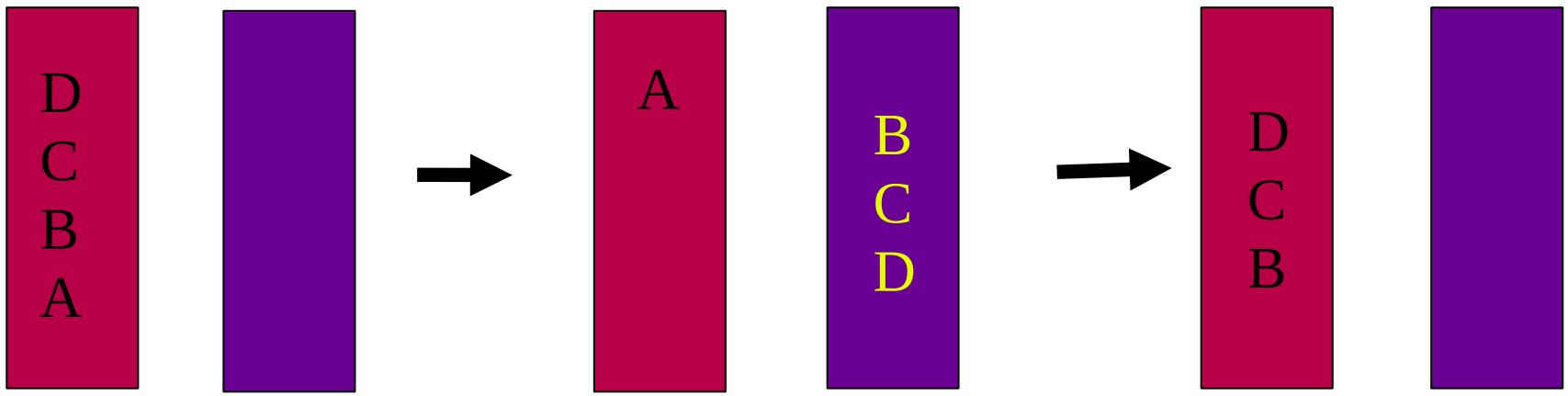
Queue

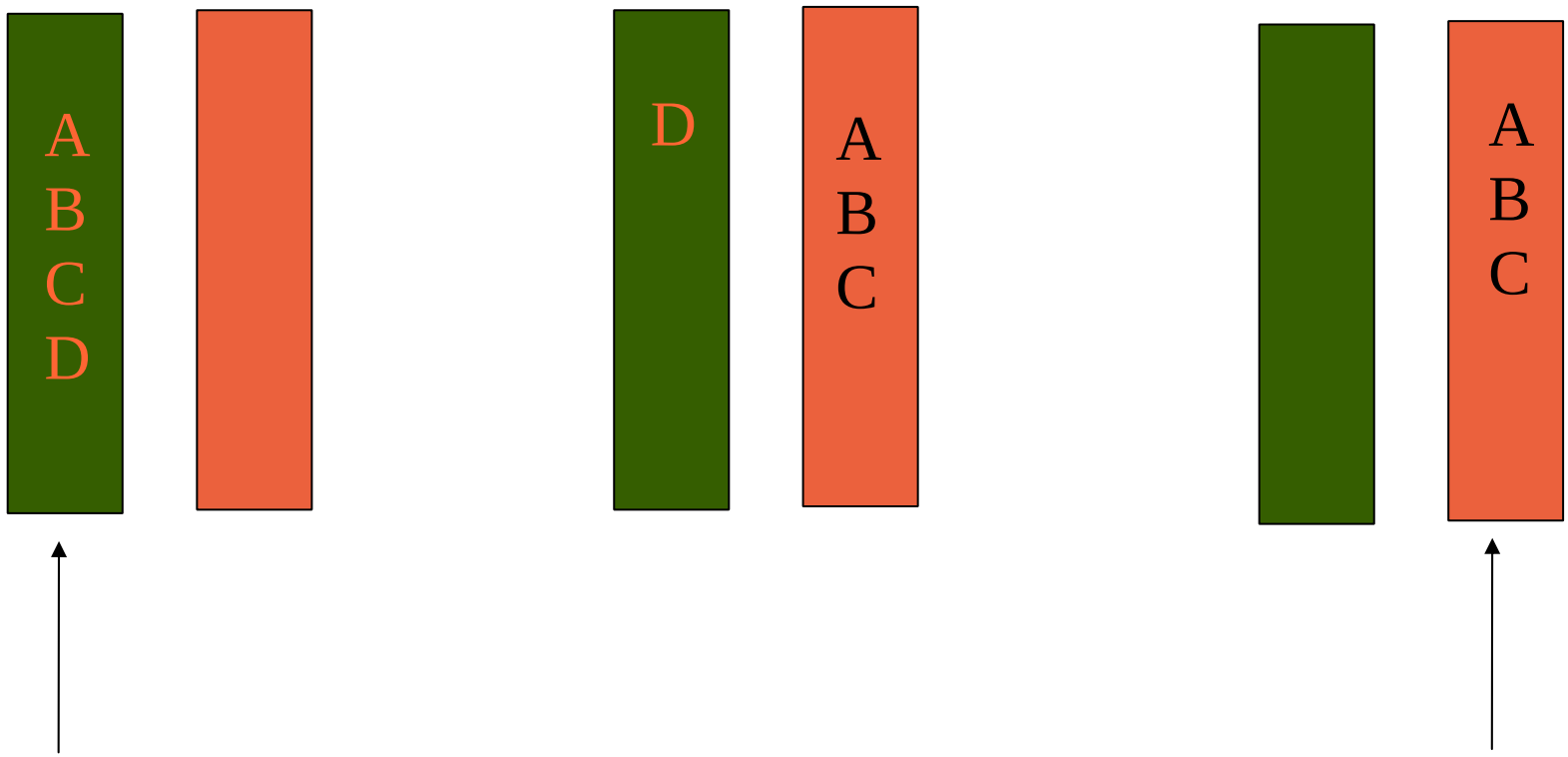
Discussion H

Queue with Stacks

A B C D



Stacks with Queues



Web Browser Cache (1)

```
public class Browser {
  private Cache cache;

  public Browser (String homepage) {
    view(homepage);
  }

  public view (String pageurl) {
    Page p = cache.getCached(pageurl);
    if (p == null) {
      Page p = new Page(pageurl);
      cache.updateCache(pageurl);
    }
    view(p);
  }
  public void view(Page p) {}
}
```

Web Browser Cache (2)

```
public class Cache {

  private Queue<Page> cashed;
  private int         limit;

  public Cache (int limit) {
    cached     = new Queue<Page>();
    this.limit = limit;
  }

  public boolean isCached (String url)  {  }
  public Page    getCached (String url) {  }
  public void    updateCache(Page p)    {  }

}
```

Web Browser Cache (3)

```
public class Cache {

  private Queue<Page> current, other, qa, qb;
  private int         limit;

  public Cache (int limit) {
    qa      = new Queue<Page>();
    qb      = new Queue<Page>();
    current = qa;
    other = qb;
    this.limit = limit;
  }

}
```

Web Server Request Buffer (1)

```
public class WebServer {
  private Queue<Request> requests;

  public Server () {
    requests = new Queue<Request>();
  }

  public void receive (Request r) {  }
  public void reply() {}
  public void run() {}
}
```

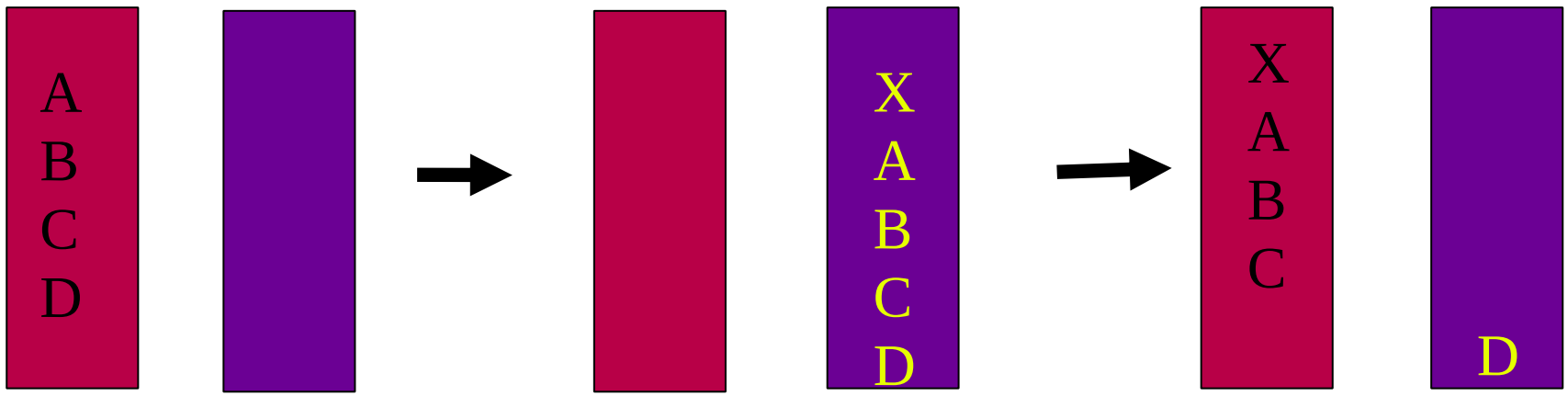
Web Server Request Buffer (2)

```
public void receive (Request r) {
  requests.offer(r);
}


public void reply() {
   Requests r = requests.get();
   ....
}
```

DeQue

A B C D



Insert
At begining

Remove from
End

Virtual Memory Manager