CIS 351-Data Structure-ArrayObjects
Feb 6, 2020

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Arrays of Objects

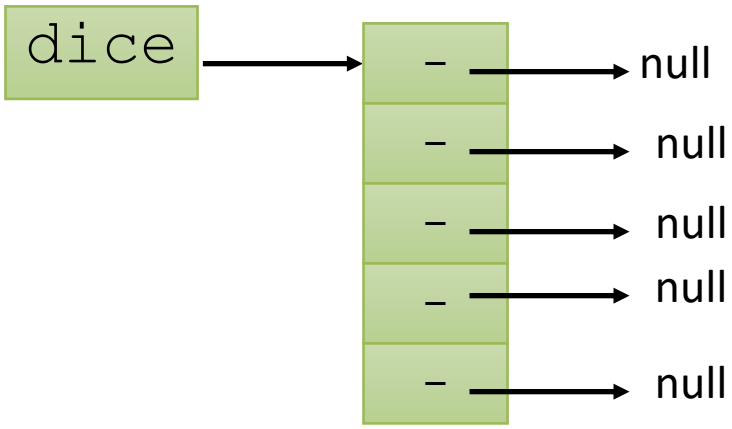
- The following declaration reserves space to store 5 references to `String` objects

```
String[] words = new String[5];
```

- It does NOT create the `String` objects themselves
- Initially an array of objects holds `null` references
- Each object stored in an array must be instantiated separately

Arrays of Objects

An array of `Die` objects when initially declared:

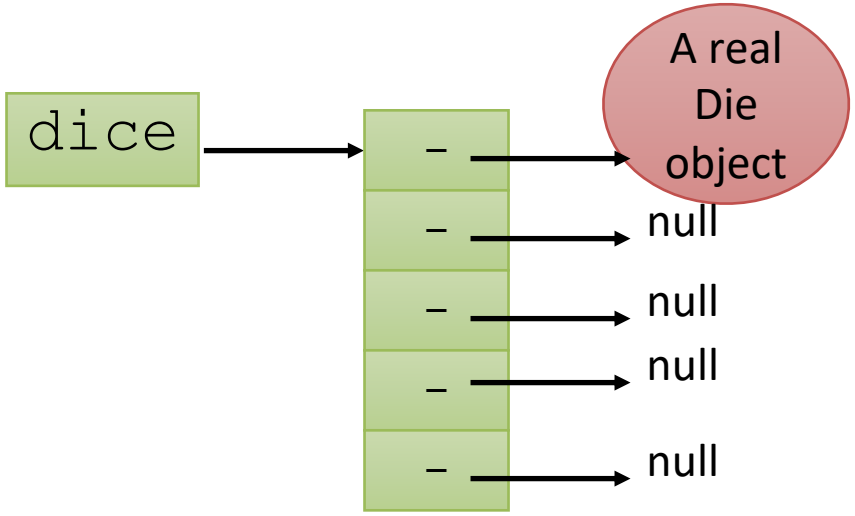



```
At this point, following
  reference would throw
  NullPointerException:
```

```
System.out.println (words[0]);
```

Arrays of Objects

After a `Die` object is created and stored in the array



Read the following code carefully

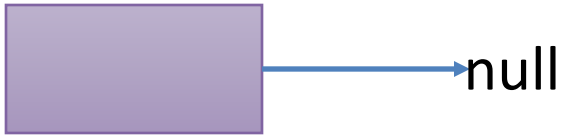
```
Die[] diceA;
Die[] diceB;
Die single;
diceA = new Die[4];

for (int i = 0; i < diceA.length; i++)
{
      diceA[i] = new Die(2);
}
diceB = diceA;
single = diceA[0];
single.setFace(6);

for (int i = 0; i < diceA.length; i++)
{
      System.out.printf("A: %d B: %d\n",
            diceA[i].getFace(),diceB[i].getFace());
}
```

diceA

diceB

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{
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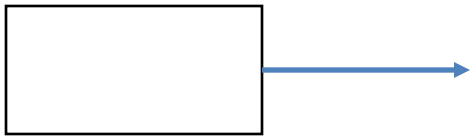
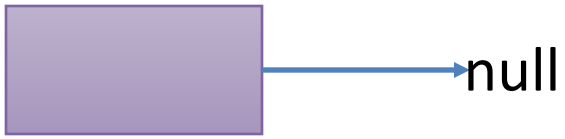
diceA[i].getFace(),diceB[i].getFace());
}
```



diceA

diceB



single

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diceA[i].getFace(),diceB[i].getFace());
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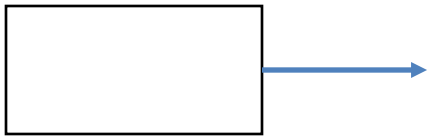

diceA

null

null

null

null

diceB

single

null

```
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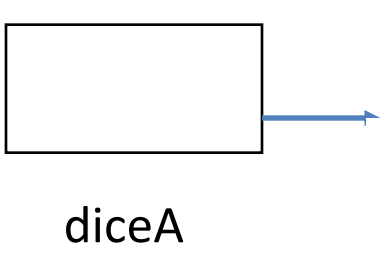

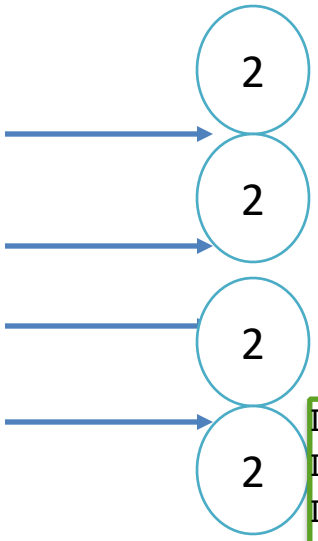

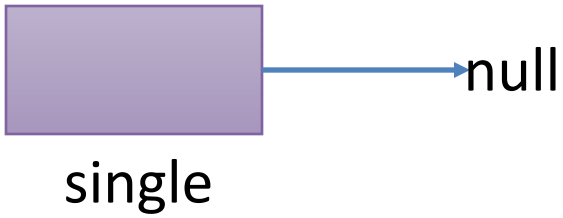


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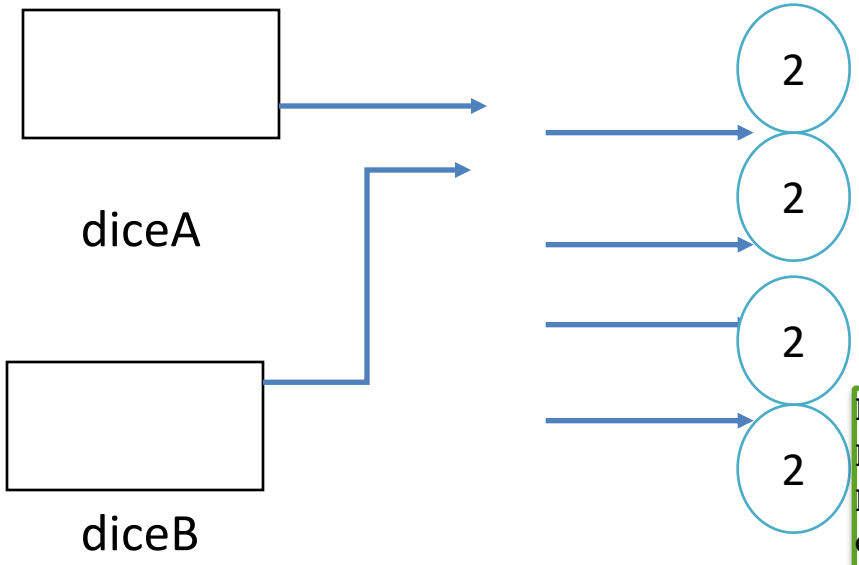

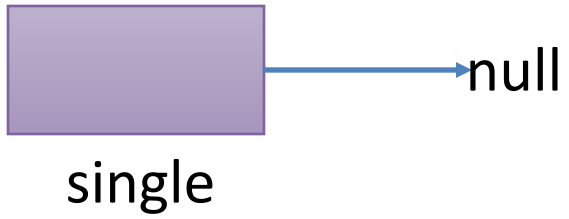


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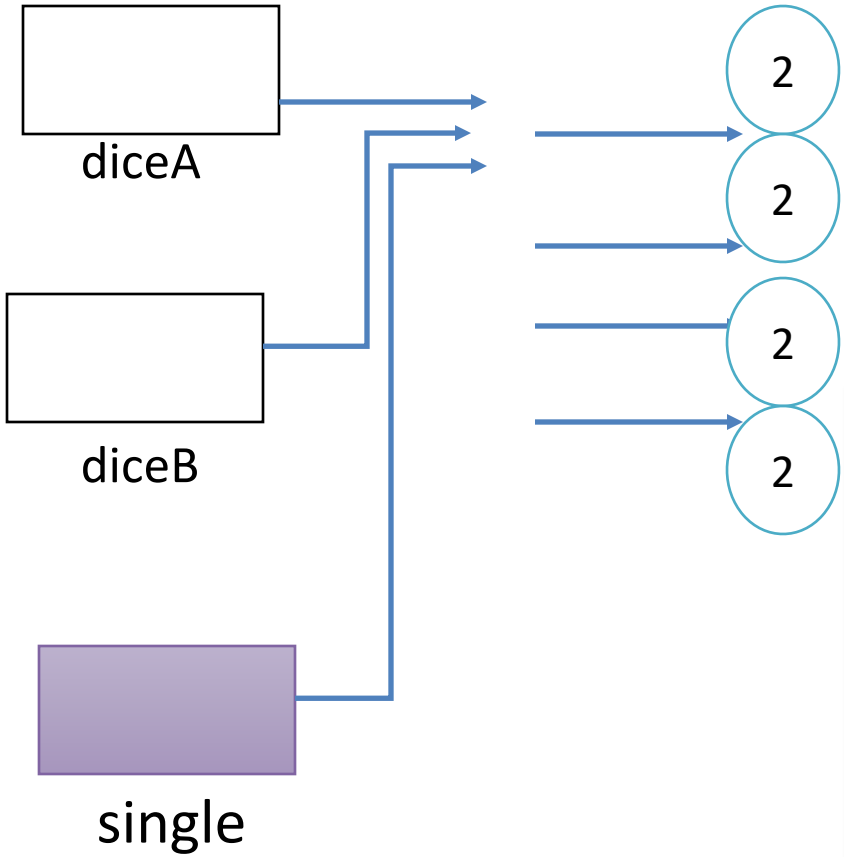


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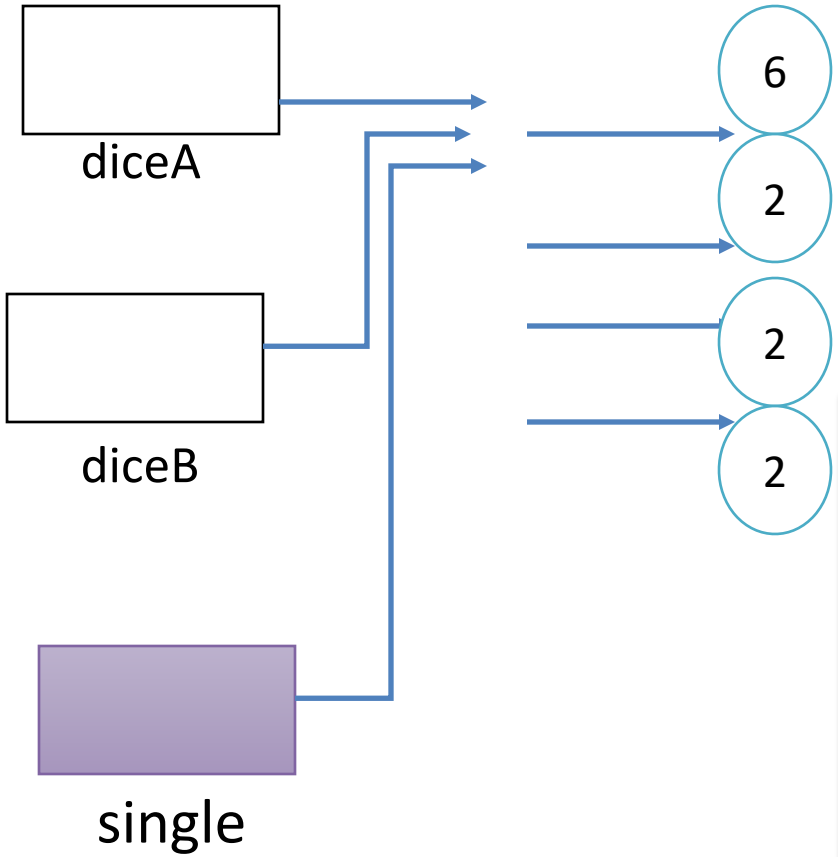


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