Quiz Solution Oct 2015

(Duration: 25 minutes. One page of notes is allowed. No exchange of materials)

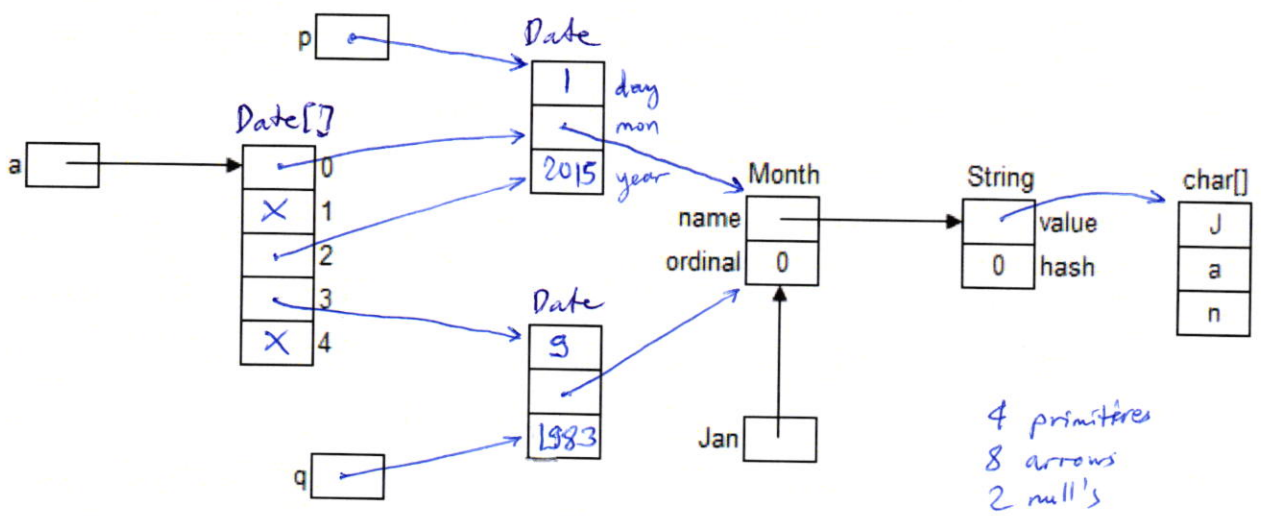
```
enum Month { Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec }
class Date {
    int day; Month mon; int year;
    public Date( int d, Month m, int y ) {
20      day=d; mon=m; year=y;
    }
    public String toString() { // "Jan 1, 2105" for p
        return ... mon+" "+day+", "+year;
    }
}
```

1. Complete the blanks shown above so that the following code is correct.

```
Date p = new Date(1, Month.Jan, 2015);
Date q = new Date(9, Month.Jan, 1983);
Date[] a = new Date[5];
a[0] = p; a[2] = p; a[3] = q;
```

2. Complete the object diagram for the three objects defined above:
Write down class names of each object, field names, field values, and missing arrows.

40



3. Show how to make `List b` using `a`, and `Set h` using `b`

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```
List<Date> b = Arrays.asList(a)   // ArrayList not accepted
Set<Date> h = new HashSet(b)      // TreeSet is wrong (but accepted)
```

4. Show how to get the first element of a and b. (write two lines of code)

10

```
a[0]
b.get(0)
```

5. Show how to set the last element of a and b to the object reference q.

10

```
a[4] = q
b.set(4, q)
```

a.length & b.size() may be used

6. Predict the values of `h.size()` and `h.contains(p)`

10

3 true

h = {null, p, q}