Term 2

Lesson 6:

AP Exam Review - Multiple Choice Practice

Consider the following output:

Which of the following code segments will produce this output?

```
0000000
111111
22222
3333
444
55
6
```

(A.) for (int k =0; k <= 7; k ++)
          {
          for (int j = k; j <= 7; j++)
              {
                      System.out.print(k);
              }
          System.out.println();
      }

Consider the following output:

Which of the following code segments will produce this output?

0000000
111111
22222
3333
444
55
6

B.
```
for (int k =0; k < 7; k++)
{
for (int j = k; j < 7; j++)
        {
                System.out.print( k );
        }
        System.out.println();
}
```

Consider the following output:

Which of the following code segments will produce this output?

```
0000000
111111
22222
3333
444
55
6
```

C.
```
for (int k =0; k < 7; k++)
    {
        for (int j = k; j < 7; j++)
        {
            System.out.print( j  );
        }
        System.out.println();
    }
```

Consider the following output:

Which of the following code segments will produce this output?

```
0000000
111111
22222
3333
444
55
6
```

(D.)
```
for (int k =0; k < 7; k ++)
    {
        for (int j = k; j <= 7; j++)
        {
            System.out.print( j );
        }
        System.out.println();
    }
```

Consider the following output:

Which of the following code segments will produce this output?

```
0000000
111111
22222
3333
444
55
6
```

E.
```
for (int k =0; k < 7; k ++)
{
        for (int j = k; j < 7; j++)
        {
                System.out.print( j + k );
        }
        System.out.println();
}
```

Questions 2-3 refer to the following incomplete class declaration.

```java
public class Birthday
{

    private int day;   // 1 <= day   <= 31
    private int month; // 1 <= month <= 12
    private int year;  // year >= 1900

    public Birthday (int m, int d, int y)
    {
        month = m;
        day = d;
        year = y;
    }
```

```java
/** Calculates the current age based
    on a date passed in
 * @param m the current month
 * @param d the current day
 * @param y the current year
 *
 * @return  the current age
 *
 * */
public int getAge (int m, int d, int y)


{
    /* missing code*/
}

//other methods not shown
}
```

2. Which of the following can be used to replace /* missing code */ so that the age is correctly calculated?

A. return y - year;

B. if (y > year)

          return y - year;

   return 0;

C. if (y > year)

          return y - year;

   if (m > month)

          return 1;

   if (d > day)

          return 1;

   return 0;

D. if (year > y)

             return year - y;

   return 0;

E. int age = y - year;

    if (m < month)

            age--;

    if (m == month && d < day)

            age--;

    return age;

Questions 2-3 refer to the following incomplete class declaration.

3. Consider the following declaration that appears in a client program:

ArrayList<Birthday> birthdayCards = new   ArrayList <Birthday>();

Assume birthdayCards has been initialized with Birthday objects.
Consider the following method that is supposed to return an ArrayList
of all the Birthdays in a given month:

```
public static ArrayList<Birthday> getCurrentBirthdays (int m, ArrayList<Birthday> bDays)
    {
        ArrayList<Birthday> list = new ArrayList<Birthday>();

        /* missing code */
         return list;
    }
```

Which of the following can be used to replace /* missing code*/ so that the code segment will work as intended?

A.   for (Birthday b: bDays)
          {
              list.add(b);
          }

B.   for (Month m: bDays)
          {
              list.add(b);
          }

C.   for (Birthday b: list)
          {
            if (m == b.getMonth())
                list.add(b);
          }

D.   for (Birthday b: bDays)
          {
              if (m == b.getMonth())
                  list.add(b);
          }

E.   for (Birthday b: bDays)
          {
              if (d == b.getDay())
                  list.add(b);
          }