Exam 2 – 2017- Spring KEY

```
String str = "abcd";
System.out.println(str.charAt(3));          // 1pt
System.out.println(str.length());           // 1pt

d
4

int[] numArray = { 5, 10, 15, 20, 25 };
System.out.println(numArray[4]);            // 1pt
System.out.println(numArray.length)         // 1pt

25
5
```

what is the output ----------

```
xx: 6
yy: 21
zz: 9
lcv: 7

doSomething trace ------------

<>
<ABC>
<4.98>
<>
<7-9-2>

isSomething trace ------------

false
false
true
true
false

printTriangles  ------------

public void printTriangle (int num) {

 for (int row=1; row<=num; row++) {
    for (int r=0; r<row; r++){
        System.out.print("*");
    }
    System.out.println("*");
 }
```

leftPad ------------------

```java
public String leftPad(String s, int spaces) {
    String paddedString = "";

    for (int i=0; i<spaces; i++)
        paddedString += ' ';

    paddedString += s;

    return paddedString;
 }
```

genRandomNum -----------------

```java
public int genRandomNum(int bound1, int bound2)
 {
    Random rnd = new Random();

    int lo = bound1;
    int hi = bound2;

    if (bound1 > bound2) {
        lo = bound2;
        hi = bound1;
    }
    return rnd.nextInt(hi-lo+1) + lo;
 }
```

isDigit --------------------

```java
public boolean isDigit(char c) {
    return (c >= '0' && c <= '9');
 }
```

countDigits ---------------

```java
public int countDigits(String s) {
    int cnt=0;

    for (char c: s.toCharArray())
        if (isDigit(c))
            cnt++;

    return cnt;
 }
```

allDigits -----------------

```java
public boolean allDigits(String s) {
```

```
    boolean result = true;

    if (s.length() == 0)
        result = false;

    int pos=0;
    while (!result && pos < s.length() ) {
       if (!isDigit(s.charAt(pos)))
        result = false;
    }
    return result;
 }

lastDay  -----------------

public int lastDay(int month) {

    int date=0;

    if (month==2)
        date=28;
    else if (month <=0 || month > 12)
        date=0;
    else if (month==4 || month==6 || month==8 || month==11)
        date=30;
    else
        date=31;

    return date;
 }

isPayDay  -----------------

public boolean isPayday(int m, int d) {
    boolean payday = false;

    if (d==15 || d==lastDay(m) )
        payday = true;

    return payday;
 }
```

Write code for a pass fail test case for the allDigits method testing this case:

```
    allDigits("$4,567") --> false

sop(allDigits("$4,567")?:"Fail":"Pass");
```