AP COMPUTER quiz3

1. Choose the correct option to complete lines 3 and 4 such that str2 will contain the letters of str1 in reverse order.

```
String str1 = "banana";
String str2 = "";
// 3. missing code
// 4. missing code
{
    str2 += str1.substring(i, i + 1);
    i--;
}
System.out.println(str2);
```

(A)
```
int i = 0;
while(i<str1.length)
```
(B)
```
int i = str1.length();
while (i >=0)
```
(C)
```
int i = str1.length() - 1;
while (i >=0)
```
(D)
```
int i = str1.length();
while (i>0)
```
(E)
```
int i = str1.length() - 1;
while (i>0)
```

2. Consider the following code excerpt:

```
int n = // some integer greater than zero
int count = 0;
int p = 0;
int q = 0;
for (p=1; p<n; p++)
    for(q=1; q<=n; q++)
        count++;
System.out.println(count);
```

(A) n^n

(B) $n^2 - 1$

(C) $(n-1)^2$

(D) $n(n-1)$

(E) n^2

3. Given the following code excerpt, determine the output:

```
int x = 0;
for (int j = 1; j < 4; j++) {
    if (x != 0 && j / x > 0)
        System.out.print(j / x + " ");
    else
        System.out.print(j * x + " ");
}
```

(A) 0 0 0
(B) 0 0 0 0
(C) 1 2 3
(D) 1 0 2 0 3 0
(E) ArithmeticException: Divide by zero

4. Consider the following code:

```
String space = " ";
String symbol = "*";
int num = 5;
for (int i = 1; i <= num; i++) {
    System.out.print(symbol);
}
System.out.println();
for (int i = 1; i <= num; i++) {
    for (int j = num - i; j > 0; j--) {
        System.out.print(space);
    }
    System.out.println(symbol);
}
for (int i = 1; i <= num; i++) {
    System.out.print(symbol);
}
```

(A) *****
    ****
    ***
    **
    *
    *****
(B) *****
     ****
      ***
       **
        *
    *****
(C) *****

```
        *
       *
      *
    *
    *****
(D) *****
    *
     *
      *
       *
    *****
(E) *****
    *
    **
    ***
    ****
    *****
```

5. What will be printed as a result of the following code excerpt?

```
int sum = 0;
for (int i=1; i<2; i++)
    for(int j=1; j<=3; j++)
        for(int k=1; k<4; k++)
            sum += (i*j*k);
System.out.println(sum);
```

(A) 18
(B) 36
(C) 45
(D) 60
(E) 108

Section 1 (10-15)