

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