

More recursion practice is below. Make a recursive tree diagram for each, then indicate what the final output is:

1. //main

Diagram:

```
String z = "";  
  
z =meth1(5, "cat");  
  
System.out.println(z);  
  
}  
  
public static String meth1 (byte x, String y){  
  
    if(byte <15)  
  
        return y + ", " + meth1(x+3, y + "s");  
  
    else  
  
        return "oh!";  
  
}
```

Output:



2. //main

Diagram:

```
meth2(77);  
  
}  
  
public static void meth2 (int x){  
  
    System.out.println((char)(x));  
  
    if (x <94)  
  
        meth2(x +9);  
  
}
```

Output:



3. //main

Diagram:

```
    int a = 7;

    a = meth3(a);

    System.out.println(a);

}

public static int meth3 (int x){

    if (x % 4 == 0)

        return 3;

    else if (x % 3 == 0)

        return 2;

    else if (x % 2 == 0)

        return 1;

    else

        return x * meth3(x + 4);

}
```

Output:

