

Problem 8:

abcdefg fedcba
abcdef _ fedcba
abcde _ _ edcba
abcd _ _ _ dcba
abc _ _ _ _ cba
ab _ _ _ _ _ ba
a _ _ _ _ _ _ a

The less the amount of for loops the better.

Solution:

```
import java.util.Scanner;
class shape
{
    public static void main (String s[])
    {
        Scanner sc = new Scanner(System.in);
        String str = "ABCDEF";
        int len = str.length();
        int space, k = len - 2;
        for (int i = 0; i < len; i++)
        {
            space = 2 * i - 1;
            System.out.println(str.substring(0, len - i));
            for (int j = 1; j <= space; j++)
                System.out.print(" ");
            for (; k >= 0; k--)
```

```
{
    System.out.println(str.charAt(k));
}
k = len - i - 2;
System.out.println();
}
}
}
```