Notes for 14 Jan 2026

Problems 1-10

String str = String.*format*("%S", "dog"); *//"DOG"*

str = String.*format*("%.2S", "dog"); *//"DO"*

str = String.*format*("%4.2S", "dog"); *//"__DO"*

'a' +'b' is an int

 Math.round(2.3) returns a long 2

Math.round(2.3f) returns an int 2

Math.round(-2.5f) returns -2

int k = 1;

for(i = 0; i<10; i++)

k += i;

 SO k = 9*10/2

Problems 11-20

Scanner requires importing util

File requires importing io.

'A' = 65

'a' = 97

'0'=48

```
List<Integer> list = new ArrayList<>();
for(int i = 0; i<10; i ++)
    list.add(i);
System.out.println(list);
Collections.rotate(list,-4);
    System.out.println(list);
```

This prints [4, 5, 6, 7, 8, 9, 0, 1, 2, 3]

REGEX

//w+

//W+

//s

//S

.?

Which of the following data structures has the best worst-case runtime for inserting an object at the end?

A.   Array   B. Hashtable

C.   Singly-Linked List   D. Binary Search
Tree

E. More than one of the above has the best runtime.

BAD question. A is correct if there is space. C is correct if the code retains a tail pointer. D is wrong. B is O(1) average but O(n) if all inputs hash to the same bucket.

 Problems 21-30

For 21 you do not have to trace the code

30. A linked list does is not a List

All others

poll() removes and returns. Returns null if nothing. remove() does the same thing but throws an exception if nothing there

what is 2's complement of -65 in 8 bit rep.

0 1 0 0 0 0 0 1 is 65

1 0 1 1 1 1 1 0 is toggled

Now add 1