

EX 1 MON/2/24

CLOSED NOTE/BOOK

ONE "HELPER SHEET"

ALLOWED NOT TO EXCEED

8.5" x 11" - anything

printed/written on
both sides OK.

NO CALCULATORS

- Convert FROM base 10 to any base
- Convert FROM any base TO base 10
- $2 \leftrightarrow 4 \leftrightarrow 8 \leftrightarrow 16$
- counting in another base
- bit twiddle problems
- expression evaluation
- convert algebraic expression to C
- predict output of this code
- write a program to...

eval expr #32

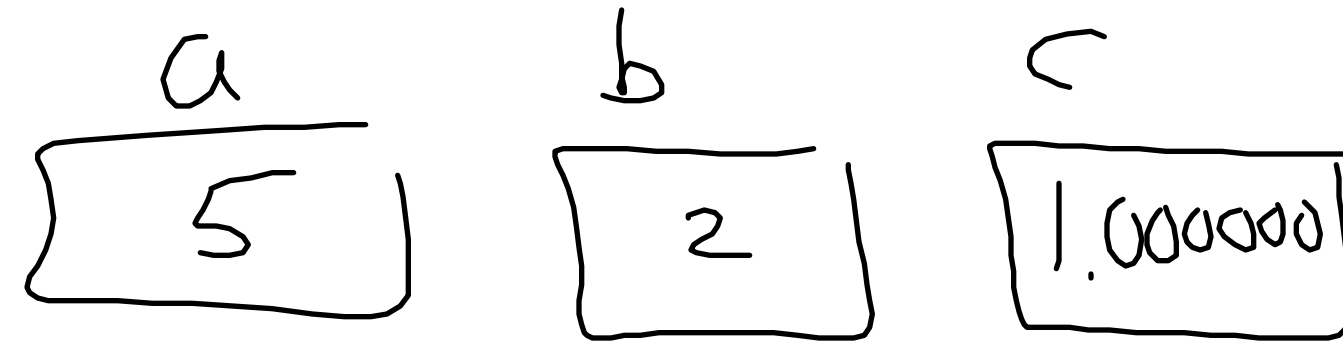
```
int a=5, b=2;
```

```
float c;
```

```
c = a % b;
```

```
printf("%f", c);
```

```
}
```



eval expr #30

int i=2, j=3, k, m;

float a, b

k = i/j * j;

m = j/i * i;

a = i/j * j;

b = j/i * i;

printf ~ k, m, a, b)

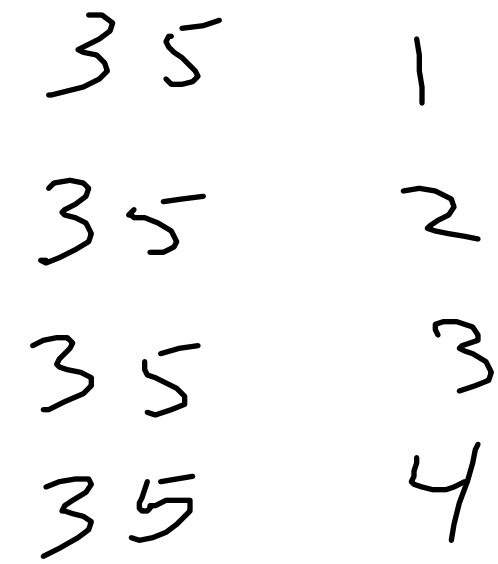
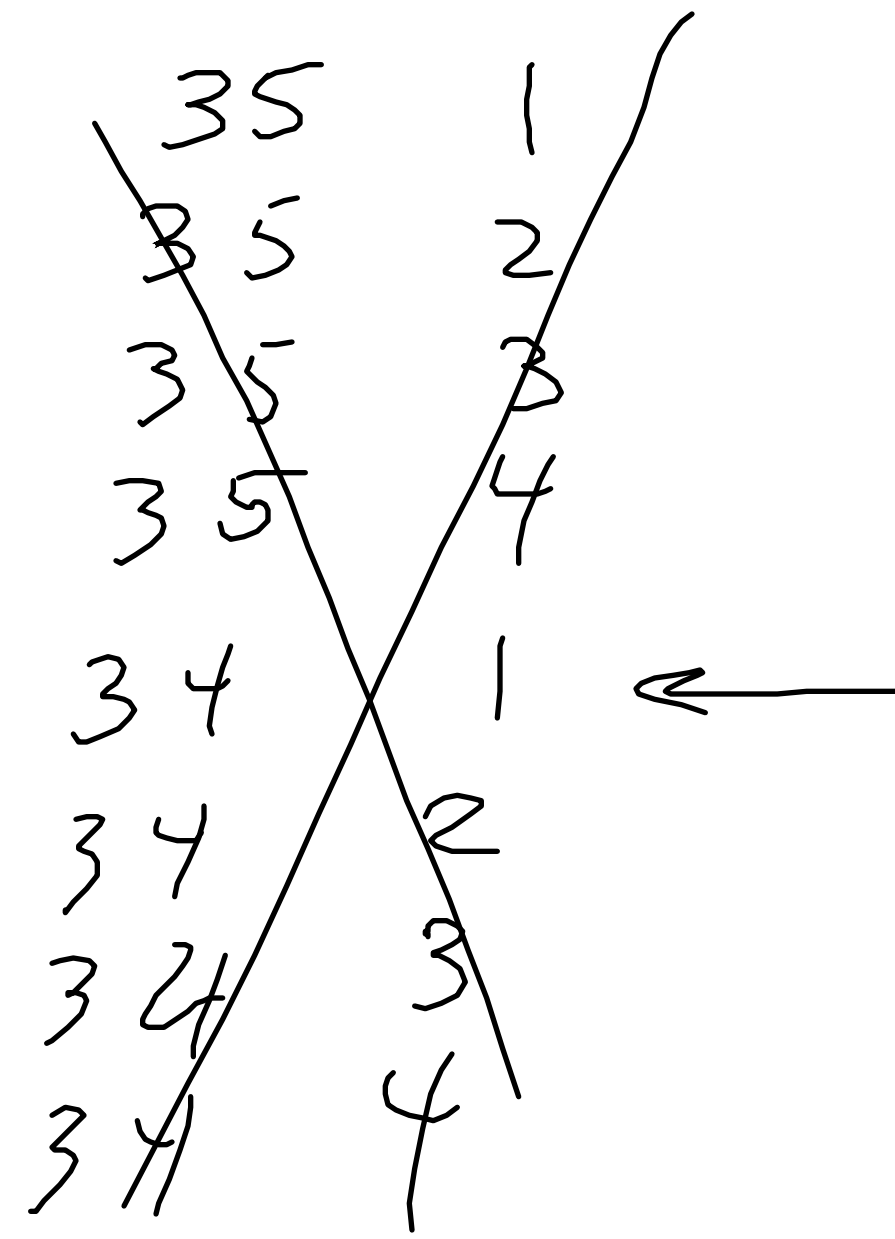
$$\frac{i}{2} \quad \frac{j}{3}$$

$$\frac{k}{0} \quad \frac{m}{2} \quad \frac{a}{0.000000} \quad \frac{b}{2.000000}$$

```

j = 1;
for (i = 35; i > 33; i = i - 1)
{
    while (j < 5)
    {
        printf("%d %d\n", i, j);
        j = j + 1;
    }
}

```



j is 5
 so the while
 loop is not
 entered