

2/24/mon
EXAM 1

convert

$$x = \frac{\frac{-B}{2} + \frac{6C}{D+1}}{\frac{4E+6}{2B+7} - 1}$$

() reqd

() opt

$$x = \left(\left(-B/2 + 6*C / (D+1) \right) / \left((4*E+6) / (2*B+7) - 1 \right) \right)$$

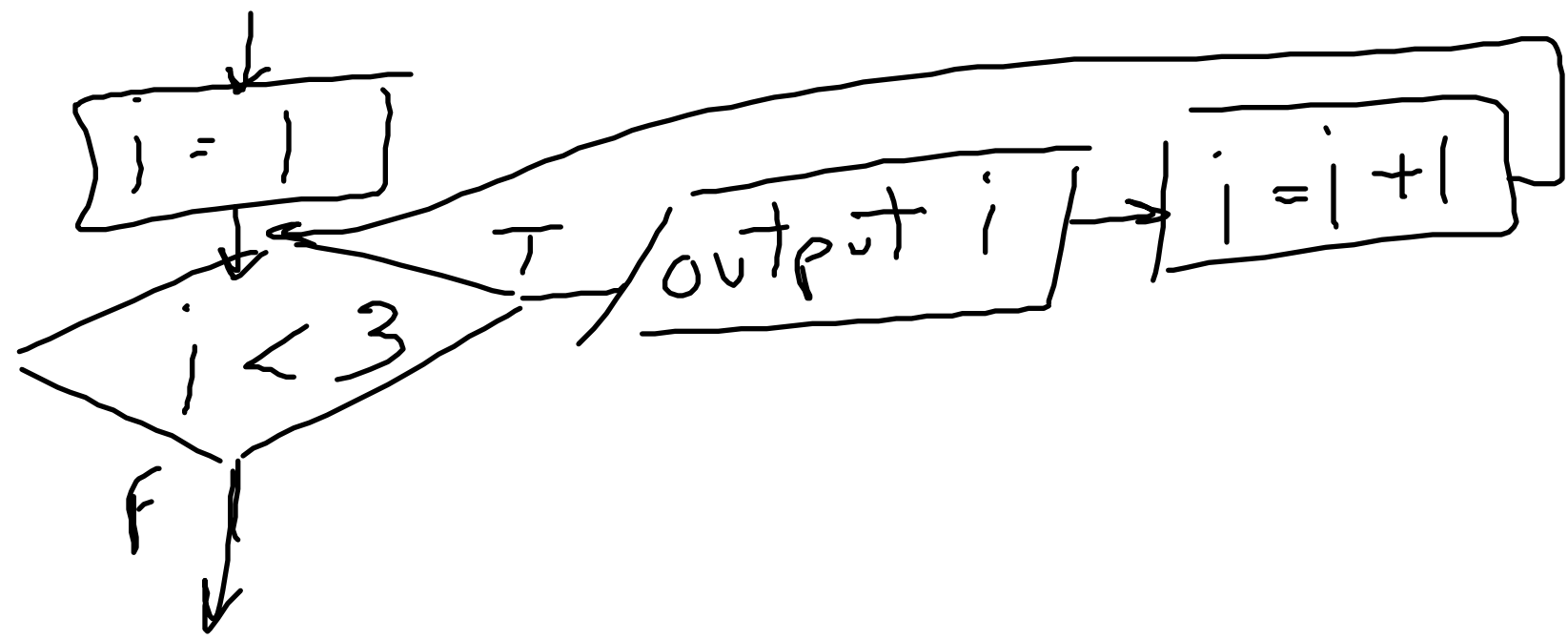
$$x = 6 + \sqrt{B^2 - 4AC}$$

$$x = 6 + \text{sqr}t \left(\begin{array}{l} B * B - 4 * A * C \\ \text{pow}(B, 2) - 4 * A * C \end{array} \right)$$

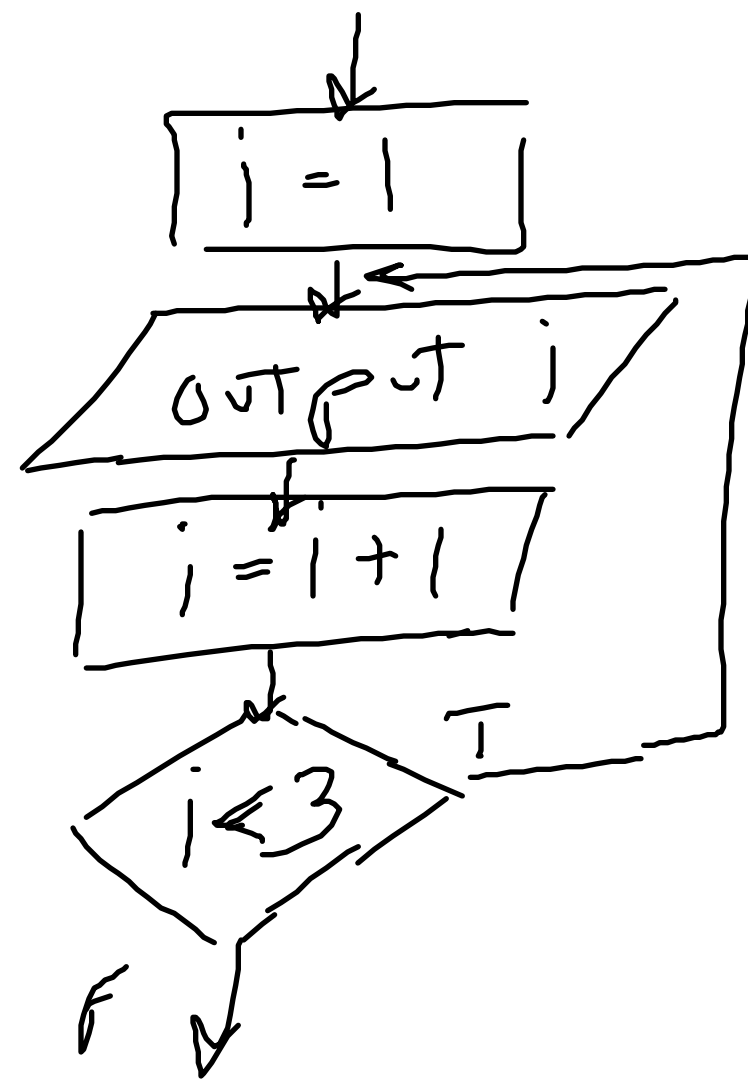
()
[]

```
i = 1;
while (i < 3)
{
    printf("%d\n", i);
    i = i + 1;
}
```

1 2



```
i = 1;
do
{
    printf("%d\n", i);
    i = i + 1;
} while (i < 3);
```



1 2

```
i = 10;  
while (i < 3)  
{  
    printf("%d", i);  
    i = i + 1;  
}
```

no output

while executed
0 or more times

```
i = 10;  
do  
{  
    printf("%d", i);  
    i = i + 1;  
} while (i < 3);
```

10

do-while executed
1 or more times

```
magic = 24;
```

```
while (1==1)
```

```
{
```

```
    printf("Guess the number: ");
```

```
    scanf("%d", &answer);
```

```
    if (answer == magic) goto win;
```

```
}
```

```
win: // more code
```

break ; → jumps out of loop (or block)

continue ; jump to end of loop & onto next iteration

// Bad example of continue

// print even numbers 1-100

```
for (i=1; i<=100; i=i+1)
{
    if (i%2 == 1) continue;
    printf("%d ", i);
}
```

// given m (1-12) Print "Jan", "Feb", ... "Dec"

```
if (m == 1)
    printf("Jan");
else if (m == 2)
    printf("Feb");
else if ( )
    ;
else if (m == 12)
    printf("Dec");
else
    printf("m out of range");
```

← expr - must be int

```
switch (m)
{
    case 1: printf("Jan"); break;
    case 2: printf("Feb"); break; — g
            ;
    case 12: printf("Dec"); break;
    default: printf("m out of range");
}

```

← could be on separate lines

←