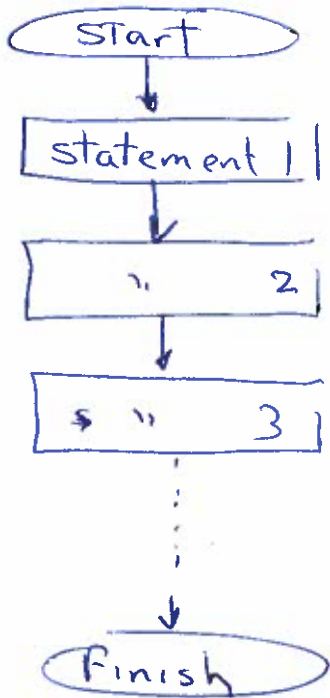


Code so far:

statement 1
 " 2
 " 3
 ...

To end

i.e. Sequentially

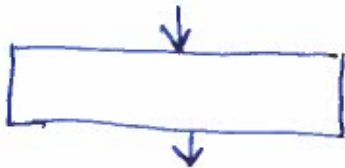


Flowcharting - showing a "graph" of your code logic

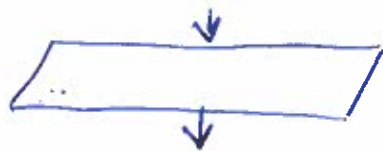
②



start/finish



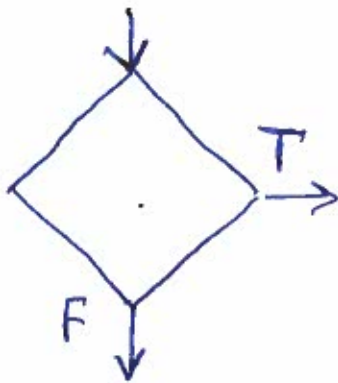
process
(assignment statements, etc)



input/output
(printf/scanf)



circle with letter
(connector)



Decision

Consider algorithm for calculation of gross pay

(3)

Say \$10/hour

Say >40 hours, Time + 1/2

person works 58 hours

$$10 * 40 + 18 * 15 = 670$$

$$\text{gross pay} = \text{Rate} * 40 + (\text{hours} - 40) * (\text{Rate} * 1.5)$$

Say 30 hours worked

← only valid for > 40

$$\text{gross pay} = 10 * 40 + (30 - 40) * (\overset{10}{\text{Rate}} * 1.5)$$
$$400 - 150$$

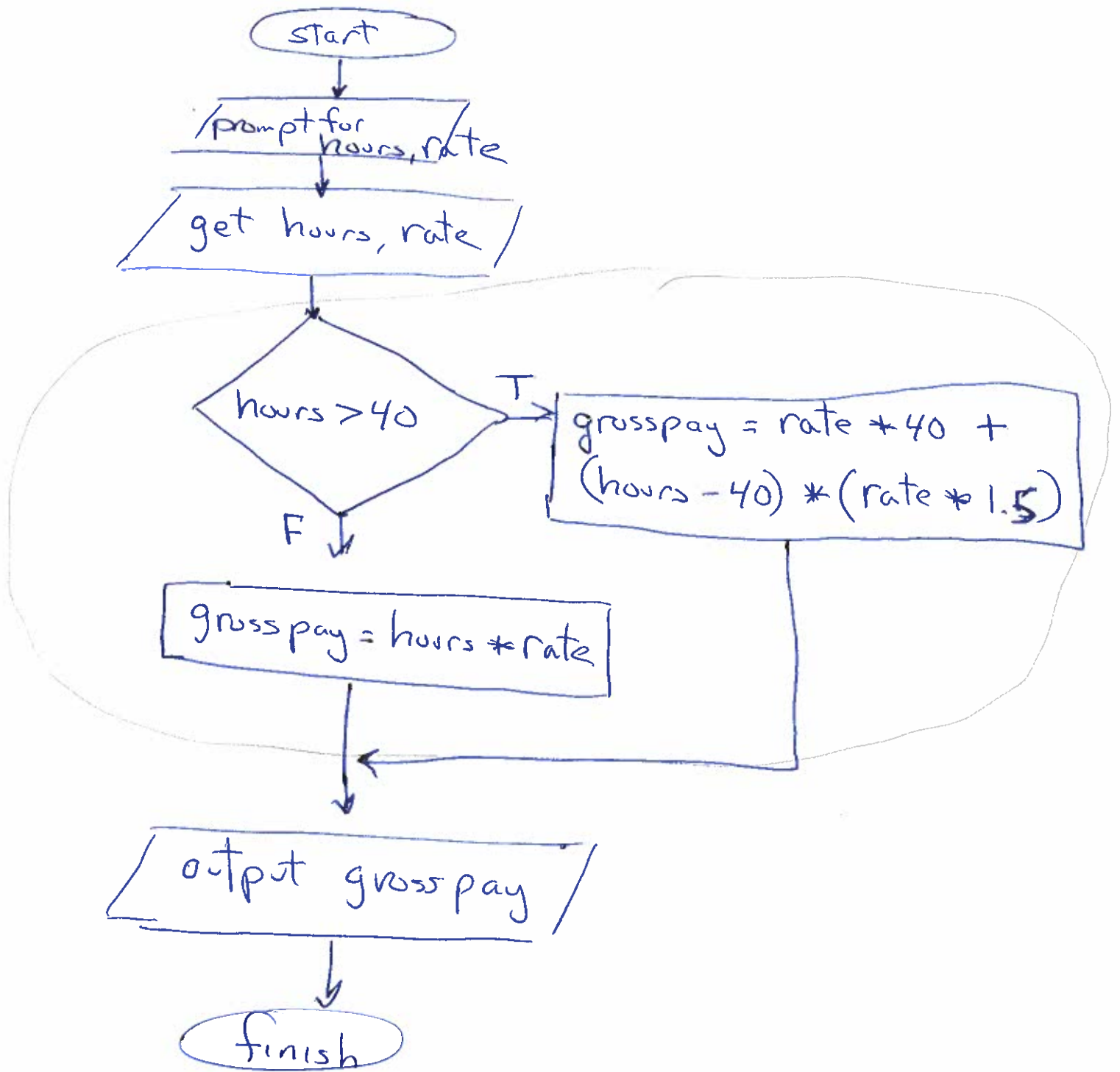
250

if under ⁴⁰ or exactly 40 worked;

$$\text{gross pay} = \text{hours} * \text{rate}$$

(4)

Flowchart algorithm to prompt & get hours and rate and calculate gross pay



5

```
if (condition) ← no ;  
{  
  statements if true  
}  
else ← no ;  
{  
  statements if false  
}
```

if statements
are a single
statement, then
{ }
optional

⑥

```
#define _CRT_SECURE_NO_WARNINGS  
#include <stdio.h>
```

```
void main()
```

```
{  
    double rate, hours, grosspay;  
    printf("Enter rate and hours worked: ");  
    scanf("%lf %lf", &rate, &hours);  
    ↙ space ↘ ↗ address of ↖
```

```
    if (hours > 40)
```

```
    {
```

```
        grosspay = rate * 40 + (hours - 40) * rate * 1.5;
```

```
    }
```

```
    else
```

```
    {
```

```
        grosspay = rate * hours;
```

```
    }
```

```
    printf("Gross pay is: ", grosspay);  
    ↖ %lf ↗
```

```
}
```