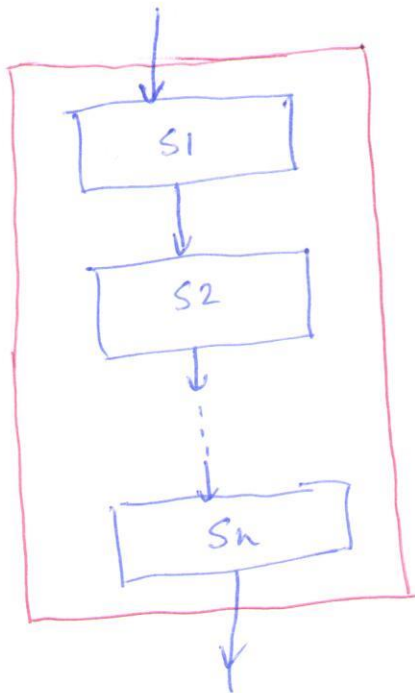# Algorithmic Structures

1. Sequence Structure

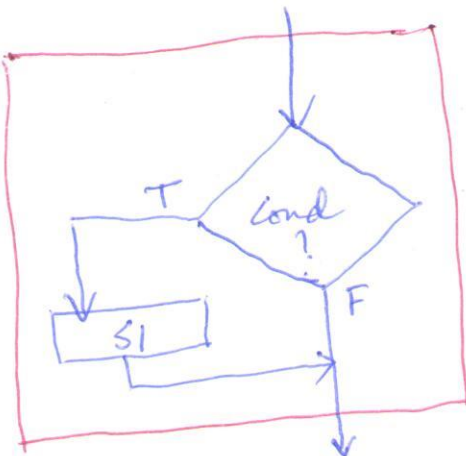### Flow chart

C-language construct

```
{
    S1;
    S2;
    :
    Sn;
}
```
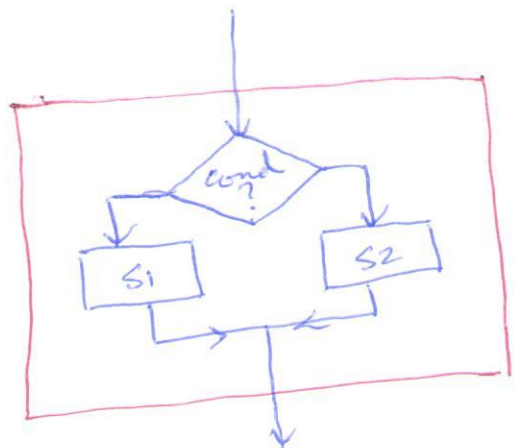
2. Conditional Structures

a.


```
if (cond)
    S1;
```
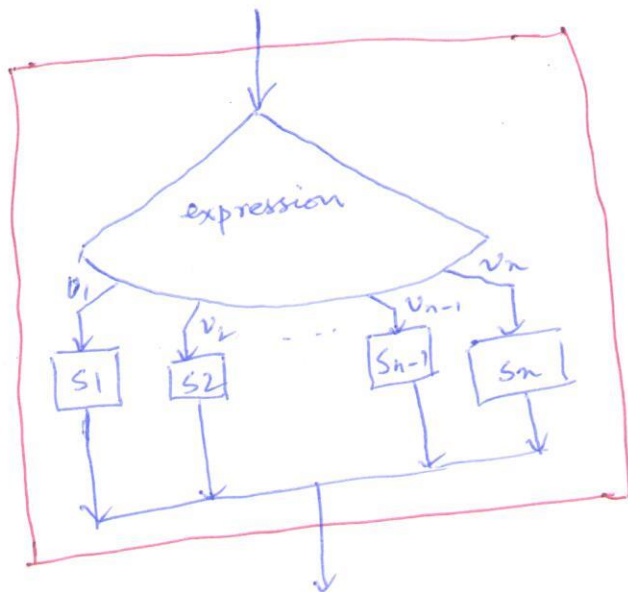
b.


```
if (cond)
    S1;
else
    S2;
```

2 c.


```
switch (expression) {
case v₁ :  s1 ;
           break ;
case v₂ :  s2 ;
           break ;
         ⋮
case vₙ₋₁ :  Sn-1 ;
             break ;
case vₙ :  Sn ;
           break ;
}
```
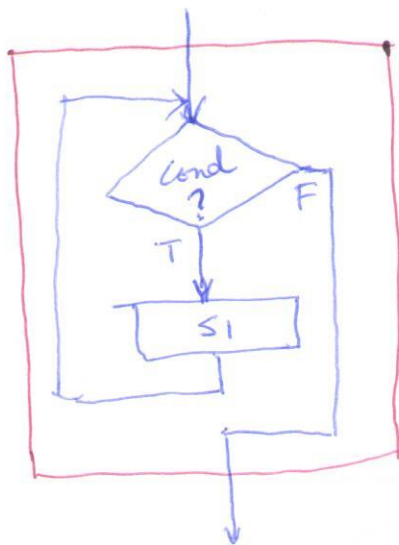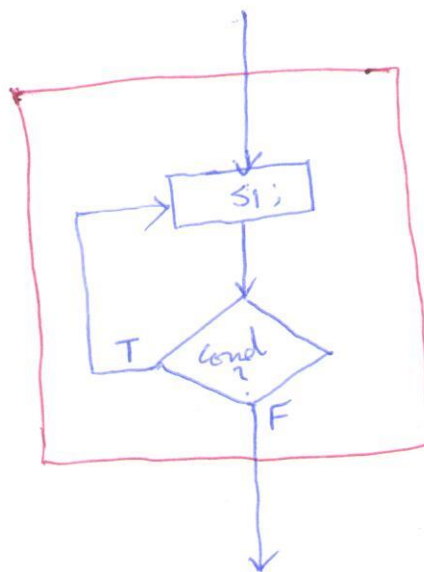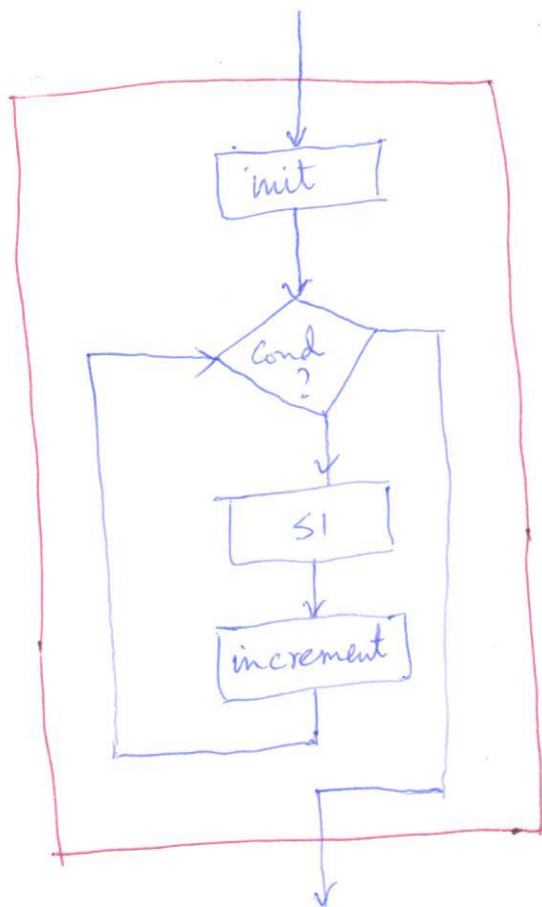
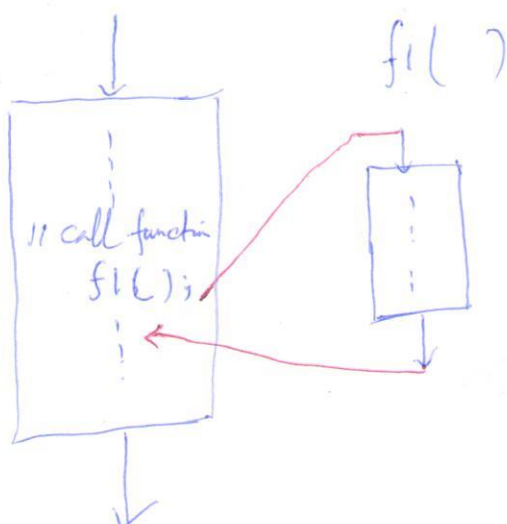## 3. Iterative Structures

a. while


```
while (cond)
    S1 ;
```

b. do-while


```
do {
    S1 ;
} while (cond) ;
```

3 c.   for loop

for (init ; cond ; increment)
    S1 ;

4.   Subprogram / Recursion

f1( )

// call function
f1( );

6. Control Transfer
      goto
      return
      break
      continue