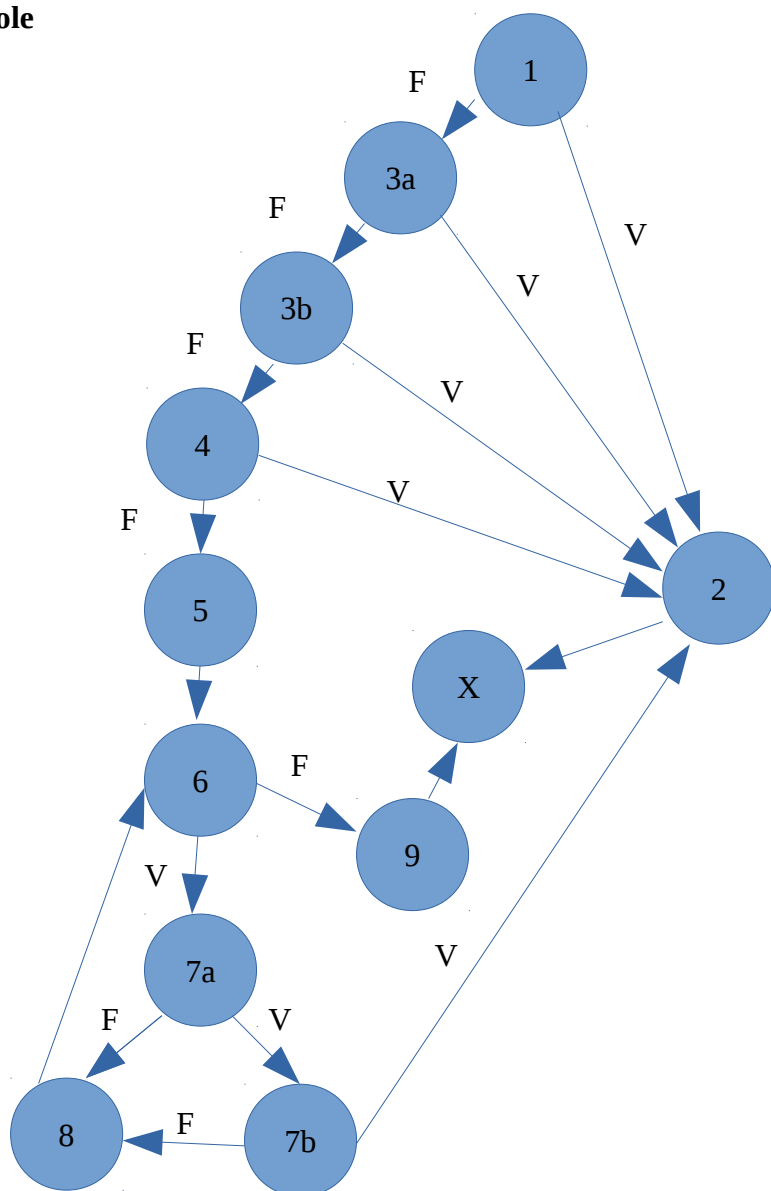


```

1  public boolean validarIdentificador(String id){
2      if (id==null)
3          return false;
3a     if (id.length()<1 || id.length()>6) 3b
4         return false;
5         char primeiroChar = id.charAt(0);
6         if (!Character.isLetter(primeiroChar))
7             return false;
8         else {
9             int i=1;
10            while (i<id.length()){
11                char ch = id.charAt(i);
12                if (!Character.isLetter(ch) && !Character.isDigit(ch)) 7b
13                    return false;
14                i++;
15            }
16        }
17        return true;
18    }

```

Grafo de Fluxo de Controle



Número de Caminhos Básicos

Complexidade Ciclomática: $A - N + 2$

N: Nós (12)

1, 2, 3a, 3b, 4, 5, 6, 7a, 7b, 8, 9, X

A: Arestas (18)

(1, 2), (1, 3a), (2, X), (3a, 2), (3a, 3b), (3b, 2), (3b, 4), (4, 2), (4, 5), (5, 6), (6, 9), (6, 7a), (7a, 7b), (7a, 8), (7b, 2), (7b, 8), (8, 6), (9, X)

Número de Caminhos = $18 - 12 + 2 = 8$

Identificação dos Caminhos Básicos

- 1 – 2 – X
- 1 – 3a – 2 – X
- 1 – 3a – 3b – 2 – X
- 1 – 3a – 3b – 4 – 2 – X
- 1 – 3a – 3b – 4 – 5 – 6 – 9 – X
- 1 – 3a – 3b – 4 – 5 – 6 – 7a – 7b – 2 – X
- 1 – 3a – 3b – 4 – 5 – 6 – 7a – 7b – 8 – 6 – 9 – X
- 1 – 3a – 3b – 4 – 5 – 6 – 7a – 8 – 6 – 9 – X

Casos de Teste

ID	Entrada	Saída Esperada	Caminho Percorrido
01	null	false	1 – 2 – X
02	“”	false	1 – 3a – 2 – X
03	abcdefg	false	1 – 3a – 3b – 2 – X
04	1	false	1 – 3a – 3b – 4 – 2 – X
05	a	true	1 – 3a – 3b – 4 – 5 – 6 – 9 – X
06	a#	false	1 – 3a – 3b – 4 – 5 – 6 – 7a – 7b – 2 – X
07	a1	true	1 – 3a – 3b – 4 – 5 – 6 – 7a – 7b – 8 – 6 – 9 – X
08	aa	true	1 – 3a – 3b – 4 – 5 – 6 – 7a – 8 – 6 – 9 – X