CS 447 Assignment 01

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Question 1.   10pts
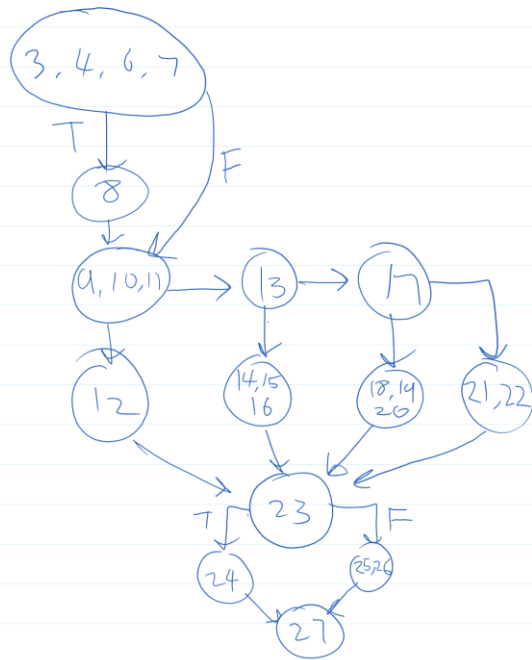
a) x = []
b) x = [3]
c) x = [1, 3, 5, 7]
d) x = [-10, -9, 0, 99, 100]

I = 1

cnt = 1

PC = second iteration after cnt = cnt + 1

Question 2.   10pts

```
1    class ForStmt(Stmt):
2        def __init__(self, var, aexp_i, aexp_j, stmt):
3            self.var = var
4            self.aexp_i = aexp_i
5            self.aexp_j = aexp_j
6            self.stmt = Stmt
```

a)

$$\frac{< x<=j, q>\downarrow false}{<for\ x=i\ to\ j\ do\ S, q>\downarrow q} \qquad \frac{< x<=j, q>\downarrow true \quad <S; for\ x=i\ to\ j\ do\ S, q>\downarrow q'}{<for\ x=i\ to\ j\ do\ S, q>\downarrow q'}$$

b)

Question 3.   20pts

a)
b)

Question 4.   30pts