

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_ Group ID: \_\_\_\_\_ Score: \_\_\_\_\_

Please give brief answers to the following questions:

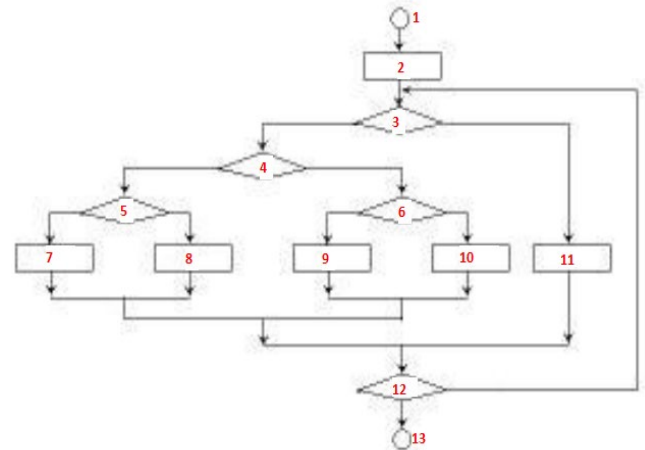
1. For the software projects, a series of stakeholders are involved. Please list at least three types of stakeholders and give a brief explanation for them.

2. According to the right flowchart, suppose all the Predicate Node 5 is complex condition and other nodes are single conditions. Please answer following questions:

(1) What is the value of Predicate Node number,  $P$  ?

(2) What is the value of the Cyclomatic Complexity,  $V(G)$ ?

(3) Please list all independent logical paths for testing.



3. There are two conventional estimation methods: LOC (lines of code) approach and FP (function point) approach. Suppose the burdened labor rate = \$8000 per month. For a type of software project, the average productivity is 625 LOC person-month (i.e. LOC/pm) and 6.4 FP/pm, respectively, and the total estimated lines of code are 35000 and 370FP, respectively. Please answer following questions.

(1) What are the costs of per LOC and per FP? In term of person-months (pm), what are the total estimated project cost by above two estimation methods, respectively?

(2) Why do FP-based metrics have advantages over LOC-based metrics in some aspects?