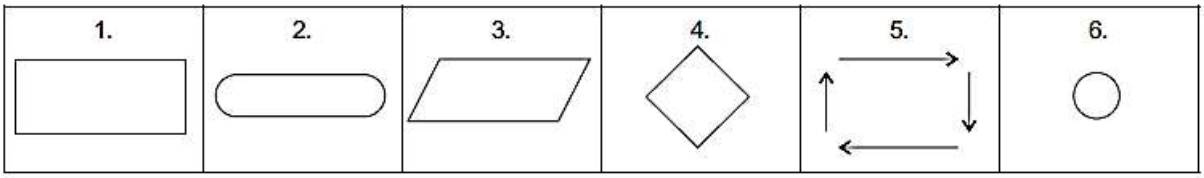
01. Fill in the blanks using the correct words from the box.

Loop	Algorithm	Flowchart	Pseudo code	Sequence	Selection	Hand trace

1. Is a set of steps for a computer program to accomplish a task. :.....
2. Graphical representation of Algorithm :.....
3. Textual representation of Algorithm :.....
4. A method to verify that code works correctly before you compile it. :.....
5. Simple steps which are to be executed one after the other :.....
6. Statement can be used to choose a specific path dependent on a condition :.....
7. Allows for a portion of an algorithm to be executed any number of times. :.....

02. The symbols used in the flowchart in given below, Identify them and write.



1. ..... 2. ..... 3.....

4. ..... 5. ..... 6.....

03. Some terms related to the pseudocode are given below, Classify them into relevant title.

read	accept	enter	type	write	show
print	display	calculate	add	mod	concatenate

The terms used in an Algorithm [Pseudocode]		
Input	**Output**	**Process**

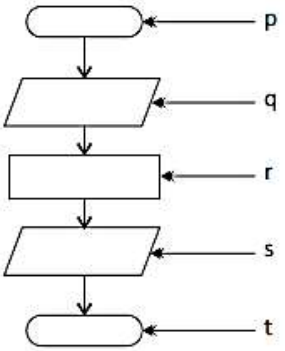
04. Based on the scenario answer the questions.

Milco is the leading supermarket in Sri Lanka. It allows the customer to purchase items through online. Milco categories three types of customer ordinary, silver and gold. Milco is planning to give 10% of discount for every purchase.

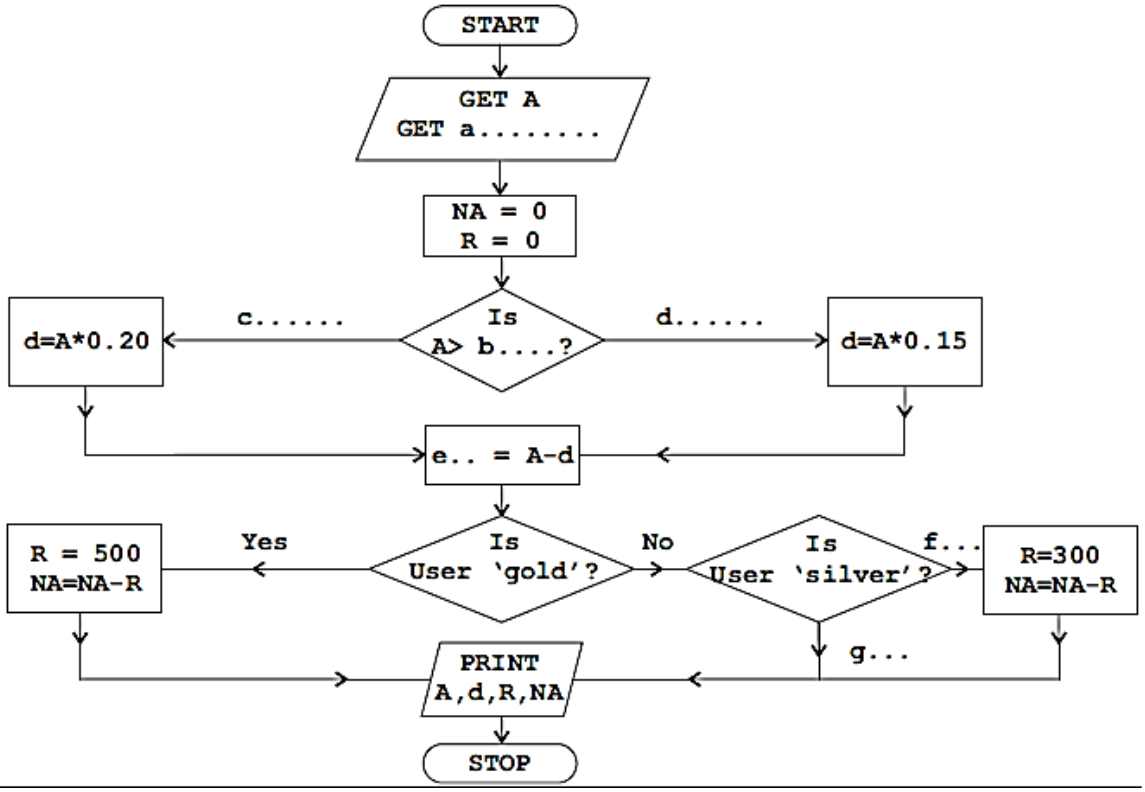
Assume that you are a computer programmer and needs to develop a computer program to Milco supermarket according to the given situation design the algorithm as flowchart or pseudo code.

a. Fill in the blanks to complete the pseudocode and flowchart to calculate discount and print Bill Amount (A), Discount(D) and Amount to be paid (NA).

```
Begin
      Get i..............
      ii.......... = Bill Amount * 0.1
      Net Amount(NA) = Bill Amount -Discount(D)
      iii........ A, D, AN
   End
```



b. Now Milco decides to give 20% discount for bill amount greater than Rs. 5000 and 15% for others, Rs 500.00 reduction (R) for gold card holders, Rs. 300 for silver card members. Complete the flowchart.



05. The following algorithm is used to calculate Interest and compound interest. Based on the algorithm answer the questions.

```
1. BEGIN
2.    GET Principal (p), Rate(r), Time(t)
3.    c = 0
4.    I = 0
5.    TA = 0
6.    IF (t==1) THEN
7.          i = p * r  * 0.01
8.          TA = i + p
9.          DISPLAY p,i,TA
10.   ELSE
11.         WHILE ( t > c )
12.               i = p * r  * 0.01
13.               TA = I + p
14.               p = TA
15.               c = c+1
16.         END WHILE
17.         DISPLAY  TA
18.   END IF
19. END
```

1. Write the answer using the line numbers of the coding.

a. Input :.....

b. Process :.....

c. Selection :.....

d. Repetition :.....

e. Output :.....

2. Draw flowchart for code snippet in the rectangle.

3. Assume that p = 10000, i = 10 and t = 2, Fill in the hand trace .

Iteration	6	11	12 (i)	13 (TA)	14 (p)	15 (c)	17
1	.....	.....	.....	.....	.....	.....	-
2	-	.....	.....	.....	.....	.....	-
3	-	.....	-	-	-	-	12 100

06. Pascal coding for adding two integers and displaying the Sum is given below, Based on the coding snippet answer the questions.

```
Var
    Num1, Num2, Sum : Integer;          <-- a
Begin {no semicolon}                    <-- b
        Write('Input number 1:');
        Readln(Num1);
        Writeln('Input number 2:');     <-- c
        Readln(Num2);
        Sum := Num1 + Num2; {addition}  <-- d
        Writeln(Sum);
        Readln;                         <-- e
End.
```

1. Write purpose of having the labels a, b, c, d, e, f.

a. .....

b. .....

c. .....

d. .....

e. .....

f. .....

2. Explain what will happen when the label 'e' is executed?

.....

.....