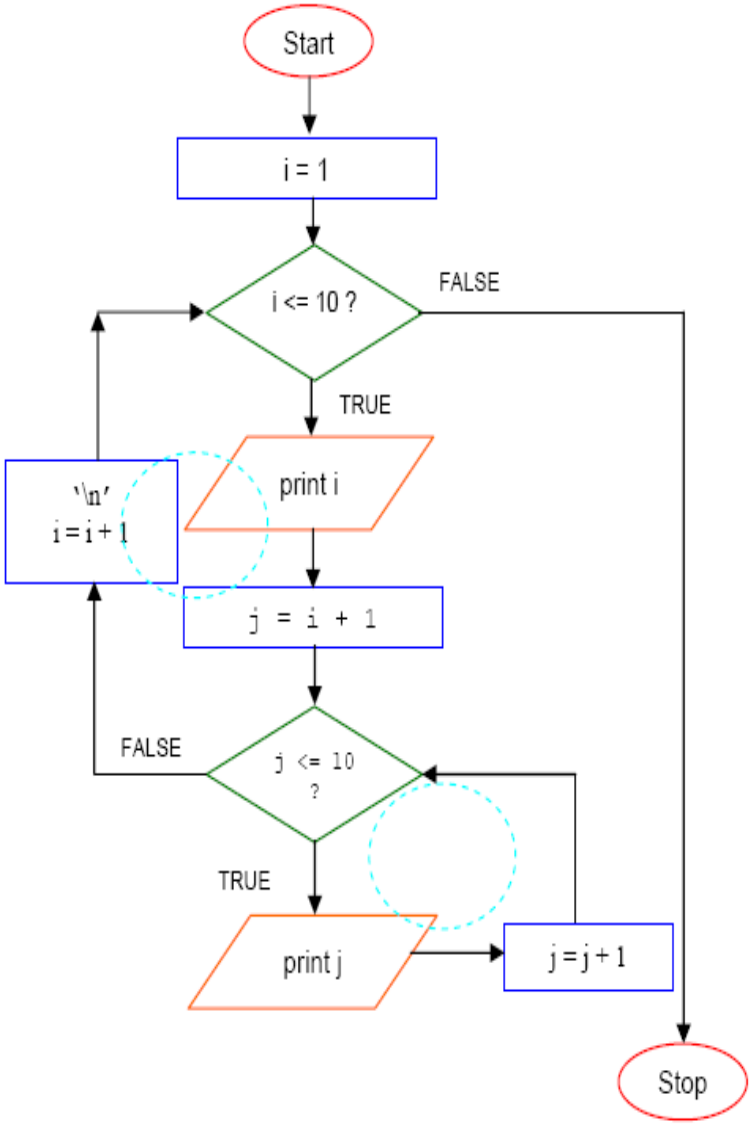
BIL110E

Quiz 1 Solution

The flowchart is given as:



One of the possible implementation is as follows:

```c
/* BIL110E Introduction to Programming Lang. (C)
    2019-2020 Fall
    Quiz 1 in Class
    The implementation of the flowchart.
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*/

#include <stdio.h>

int main()
{
    int i, j;
    for(i=1; i<=10; i++) {
        printf("%d", i);
        for(j=i+1; j<=10; j++)
            printf("%d", j);
        printf("\n");
    }
    return 0;
}
```

Common Mistakes:

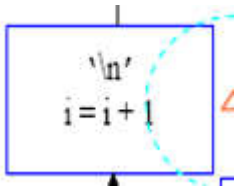
- There should be two succesive loops to implement the flowchart.
    - Loops can be done by “for”, “while”, “do-while” or “goto”.
- After the loop, if there is a conditional statement in the loop itself, there is no need to put “if” statement. “If” is already in there. In the figure below, there is no need for the “if” statement in the second line.

```c
for (i=1; i<=10; i++){
    if (i<= 10)
```

- There is no need for “if, else, else-if, break” statements for this example. Beacuse, when you construct a loop you already define the starting and ending points. In the figure below, the loop starts with i=1, it goes on for the conditions of i≤10 and the counter “i” is increased by 1 at the end of each iteration.

```c
for(i=1; i<=10; i++)
```

- The use of the escape character should be done as instructed in the flowchart. When printing i, j it is not instructed to use \n. The flowchart specifically indicates where it should be used. (If \n is not used as instructed, -5 points.)



- You should include comments in your code. (If there is no comment -5 points.)