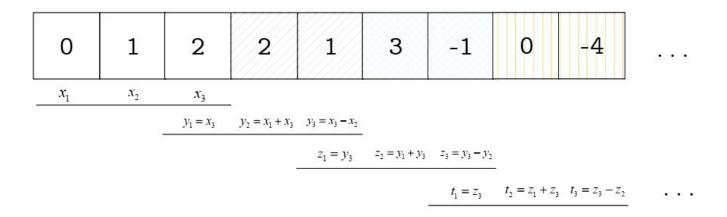
EED1005 Introduction to Programming - Laboratory Quiz 2

November 7, 2018

1. a) Write flowchart for an algorithm that generate the sequence that elements of is determined as given rules. b) Write c code of your flowchart (50p).



```
Enter an integer: 4

4

5

1st element of pair: 2

2nd element of pair: 1

2nd element of pair: 1

2. attempt

2. attempt

Enter an integer: 6

6

1st element of pair: 0

2nd element of pair: -1

3. attempt
```

```
Start
          Obtain degree,
          n^{th} number of
            sequence
          num 0 = 0;
          num 1 = 1;
          num 2 = 2;
                                        Print num_new1
                                         Print num_new2
            i < degree
                                            END
num new1 = (num 0 + num 2)
num new2 = (num 2 - num 1)
       num 0 = num 2
     num 1 = num new1
      num^{-}2 = num new2
           i = i+1
```

```
#include <stdio.h>
int main() {
   int num 0, num 1, num 2, degree;
   int num new1, num new2;
   printf("Enter an integer : ");
   scanf("%d", &degree);
   num 0 = 0;
   num 1 = 1;
   num 2 = 2;
       for (int i = 3; i < degree ; ++i) {</pre>
           num new1 = (num 0 + num 2);
           num new2 = (num 2 - num 1);
           num 0 = num 2;
           num 1 = num new1;
           num 2 = num new2;
   printf("1st element of pair: %d\n", num new1);
   printf("2nd element of pair: %d\n", num new2);
    return 0;
```