1) **Idea**

Get-coin game it's looks like a **packman** game, it's very simple you need to move **Right** or **Left** or **Up** or **Down** on **2D** coordinate system and try to get coins as much as, to get a coin you need to be in **coin's** postilion. (you can move like you want, get coins It's up to you :))

Input

A **string** contains that where the coins locate and your current position and the steps you will take it. (use point **2** to know how to write it)

2) **Description for language**

< start > → [**Coins Map** < Position >] [(**Start Position** (< Point > , < Point >)) (**Steps** < Step >)]

< Step > → < Right > | < Left > | < Up > | < Down >

< Right > → **R** < Right ' >

< Right ' > → **R** < Right ' > | **L** < Left ' > | **U** < Up ' > | **D** < Down ' > | **ϵ**

< Left > → **L** < Left ' >

< Left ' > → **L** < Left ' > | **R** < Right ' > | **U** < Up ' > | **D** < Down ' > | **ϵ**

< Up > → **U** < Up ' >

< Up ' > → **U** < Up ' > | **L** < Left ' > | **R** < Right ' > | **D** < Down ' > | **ϵ**

< Down > → **D** < Down ' >

< Down ' > → **D** < Down ' > |**U** < Up ' > | **L** < Left ' > | **R** < Right ' > | **ϵ**

< Position > → (< Point >, < Point >) < Position' > | (- < Point >, < Point >) < Position' > |

(< Point >, - < Point >) < Position' > | (- < Point >, - < Point >) < Position' >

< Position' > → , < Position > | **ϵ**

< Point > → < Id > < Point' >

< Point' > → < Point > | **ϵ**

< Id > → **0 | 1 | …. | 9**

3) **Sample of accepted strings**

- [**Coins Map** (2 , 4)] [(**Start Position** (0 , 0)) (**Steps** R R U U U U)]
- [**Coins Map** (0 , 0) , (0 , 2)] [(**Start Position** (0 , 1)) (**Steps** L R R)]

4) **Sample of rejected strings**

- Empty string
- **Coins Map** (2 , 4)] [(**Start Position** (0 , 0))

5) **Prototype of interface**

C++ graphics

6) **Team**

- يوسف طارق محسن
- مجد غريب مجد
- مجد أحمد عبدالفتاح حسين