

AI LAB 1

Sliding puzzle 3X3 problem

Arranging the numbers from 0 to 7 in order in 3X3 Sliding Puzzle:

Writeup:

LAB - 1

21/10/21

Sliding Puzzle 3x3 Problem

Arranging the numbers from 0 to 7 in order in 3x3 Sliding Puzzle :

```
numbers = [0, 1, 2, 3, 4, 5, 6, 7]
```

```
print(" ")
```

```
x=0
```

```
y = x + 3
```

```
for numb in range(3):
```

```
    a=0
```

```
    for num in numbers[x:y]:
```

```
        if (a!=2):
```

```
            print(" ", num, end=" ")
```

```
            print("|", end="")
```

```
        else:
```

```
            print(" ", num, end=" ")
```

```
        a += 1
```

```
    if (numb != 2):
```

```
        print()
```

```
        print("----+----+----")
```

```
    else:
```

```
        print()
```

```
x=y
```

```
y = x + 3
```

Output :

0		1		2
-----+-----+-----				
3		4		5
-----+-----+-----				
6		7		

Code:

```
Terminal  Help  Sliding puzzle initial.py - Visual Studio Code

Untitled-1  Configure Java Runtime  Sliding puzzle initial.py X  [Run] [Debug] [More]

D: > Desktop > AI LAB PROGRAMS > Sliding puzzle initial.py > ...

1  numbers = [0,1,2,3,4,5,6,7]
2  print(" ")
3  x = 0
4  y = x+3
5  for numb in range(3):
6      a=0
7      for num in numbers[x:y]:
8          if(a!=2):
9              print(" ",num,end=" ")
10             print("|",end="")
11         else:
12             print(" ",num,end=" ")
13         a += 1
14     if(numb!=2):
15         print()
16         print("----+----+----")
17     else:
18         print()
19     x=y
20     y=x+3
```

Output:

```
PS D:\Desktop\AI LAB PROGRAMS>
021595\pythonFiles\lib\python\d

  0 | 1 | 2
---+---+---
  3 | 4 | 5
---+---+---
  6 | 7 |
```