

Test 1 :

This test is one where both the lifts are on the same floor and user knows exactly what to input.

The user enters the number of floors in the building, the floor they are at and the floor they want to go to. The user even confirms that they would like to call the lift

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
  RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
  Please enter the number of floors in the building: 10
  Number of people in the lift: 0
  Lift 1 is on floor: 7
  Lift 2 is on floor: 7
  Please enter the floor you are currently on: 5
  Please press c if you want to call the lift: c
  Lift 1 is coming
  Waiting time is 9 secs
  Please enter the floor you want to go to: 10
  The lift will reach the destination in 15 secs
  >>>
```

Test 2 :

This test is one where both the lifts are on the different floors and user knows exactly what to input.

The user enters the number of floors in the building, the floor they are at and the floor they want to go to. The user even confirms that they would like to call the lift.

This is to test if lift 2 will come as predicted and the code works, lift 2 does arrive

```
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Type "copyright", "credits" or "license()" for more information.
>>>
  RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
  Please enter the number of floors in the building: 10
  Number of people in the lift: 1
  Lift 1 is on floor: 4
  Lift 2 is on floor: 7
  Please enter the floor you are currently on: 8
  Please press c if you want to call the lift: c
  Lift 2 is coming
  Waiting time is 7 secs
  Please enter the floor you want to go to: 1
  The lift will reach the destination in 19 secs
  >>> |
```

Test 3 :

This test is one where both the lifts are on the different floors and user knows exactly what to input.

The user enters the number of floors in the building, the floor they are at and the floor they want to go to. The user even confirms that they would like to call the lift.

This is to test if lift 1 will come as predicted and the code works, lift 1 does arrive

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
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Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 10
Number of people in the lift: 6
Lift 1 is on floor: 3
Lift 2 is on floor: 10
Please enter the floor you are currently on: 2
Please press c if you want to call the lift: c
Lift 1 is coming
Waiting time is 7 secs
Please enter the floor you want to go to: 10
The lift will reach the destination in 21 secs
>>>
```

Test 4 :

This test is one where both the lifts are on the different floors and user knows exactly what to input.

The user enters the number of floors in the building, the floor they are at and the floor they want to go to. The user even confirms that they would like to call the lift.

This is to test if time to arrive is displayed correctly if the lift is on the same floor as the user's current floor

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
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Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 10
Number of people in the lift: 2
Lift 1 is on floor: 9
Lift 2 is on floor: 1
Please enter the floor you are currently on: 1
Please press c if you want to call the lift: c
Lift 2 is coming
Waiting time is 5 secs
Please enter the floor you want to go to: 10
The lift will reach the destination in 23 secs
>>> |
```

Test 5 :

This test is one where both the lifts are on the different floors and user does not know exactly what to input.

The user enters the number of floors in the building as negative number first and then they get another chance to enter the correct number of floors in the building, the floor they are at and the floor they want to go to. The user even confirms that they would like to call the lift.

This is to test if time to arrive is displayed correctly if the lift is on the same floor as the user's current floor

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: -1
Sorry this building does not have basement enter any number more than 0: 10
The building has 10 floors
Number of people in the lift: 4
Lift 1 is on floor: 7
Lift 2 is on floor: 9
Please enter the floor you are currently on: 1
Please press c if you want to call the lift: c
Lift 1 is coming
Waiting time is 17 secs
Please enter the floor you want to go to: 10
The lift will reach the destination in 23 secs
>>> |
```

Test 6 :

This test is one where both the lifts are on the different floors and user does not know exactly what to input.

The user enters the number of floors in the building as Zero number of floors at first and then they get another chance to enter the correct number of floors in the building, the floor they are at and the floor they want to go to. The user even confirms that they would like to call the lift.

This is to test if time to arrive is displayed correctly if the lift is on the same floor as the user's current floor

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 0
This building starts from floor 1 please enter anything above 1: 10
The building has 10 floors
Number of people in the lift: 3
Lift 1 is on floor: 9
Lift 2 is on floor: 7
Please enter the floor you are currently on: 5
Please press c if you want to call the lift: c
Lift 2 is coming
Waiting time is 9 secs
Please enter the floor you want to go to: 7
The lift will reach the destination in 9 secs
>>>
```

Test 7 :

This test is one where both the lifts are on the different floors and user does not know exactly what to input.


The user does not enter correct current floor and reach floor, the user gets one more chance but if they do not enter the correct floor again then the program just runs with it.

```
Python 3.6.3 Shell
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Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 10
Number of people in the lift: 5
Lift 1 is on floor: 3
Lift 2 is on floor: 4
Please enter the floor you are currently on: 20
Please recheck the floor you are on, and re-enter: 20
You are on floor, 20
Please press c if you want to call the lift: c
Lift 2 is coming
Waiting time is 37 secs
Please enter the floor you want to go to: 30
Please enter floor that is in the building: 30
The lift will reach the destination in 25 secs
>>>
```

Test 8 :

This test is one where both the lifts are on the different floors and user does not know exactly what to input.

The user enters the number of floors in the building, the floor they are at and the floor they want to go to. The user inputs a wrong letter and the user is asked to enter 'y' or 'n', then user then inputs 'y' to confirm that they want to call the lift.


 Python 3.6.3 Shell

```
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Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 10
Number of people in the lift: 1
Lift 1 is on floor: 10
Lift 2 is on floor: 9
Please enter the floor you are currently on: 5
Please press c if you want to call the lift: f
Do you want to call the lift? y or n : y
Lift 2 is coming
Waiting time is 13 secs
Please enter the floor you want to go to: 9
The lift will reach the destination in 13 secs
>>> |
```

Test 9 :

This test is one where both the lifts are on the different floors and user does not know exactly what to input.

The user enters the number of floors in the building as 0 and then again as 0, the program then crashes after that because in the next parts of the code, the floor input as 0, does not help.


 Python 3.6.3 Shell

```
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Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 0
This building starts from floor 1 please enter anything above 1: 0
The building has 0 floors
Number of people in the lift: 2
Traceback (most recent call last):
  File "C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py", line 39, in <module>
    lift_1 = random.randint(1,floor)
  File "C:\Users\Administrator\AppData\Local\Programs\Python\Python36-32\lib\random.py", line 220, in randint
    return self.randrange(a, b+1)
  File "C:\Users\Administrator\AppData\Local\Programs\Python\Python36-32\lib\random.py", line 198, in randrange
    raise ValueError("empty range for randrange() (%d,%d, %d)" % (istart, istop, width))
ValueError: empty range for randrange() (1,1, 0)
>>> |
```

Test 10 :

This test is one where both the lifts are on the different floors and user does not know exactly what to input.

The user enters the number of floors in the building, the floor they are at and the floor they want to go to. The user inputs a wrong letter and the user is asked to enter 'y' or 'n' , then user then inputs 'n' to confirm that they do not want to call the lift

 Python 3.6.3 Shell

```
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct  3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Administrator\Desktop\Programming coursework\Coursework - part a.py
Please enter the number of floors in the building: 10
Number of people in the lift: 10
Lift 1 is on floor: 5
Lift 2 is on floor: 5
Please enter the floor you are currently on: 4
Please press c if you want to call the lift: 6
Do you want to call the lift? y or n : n
Lift is not called
>>>
```