10. Python program to find the average of 10 numbers using while loop

```python
total_sum = 0

for n in range (10):
    # take inputs
    num = float(input('Enter number: '))
    # calculate total sum of numbers
    total_sum += num

# calculate average of numbers
avg = total_sum / 10

# print average value
print('Average of numbers = %0.2f' %avg)
```

Output:

Enter number:

1

Enter number:

2

Enter number:

3

Enter number:

4

Enter number:

5

Enter number:

6

Enter number:

7

Enter number:

8

Enter number:

9

Enter number:

1

Average of numbers = 4.60