

1. Write a function to check whether a number falls in a given range

```
def test_range(n):
```

```
if n in range(3,9):
```

```
    print( " %s is in the range"%str(n))
```

```
Else :
```

```
    print("The number is outside the given range.")
```

Test range (5)

2. Some board games require you to reduce the number of cards you are holding by half, rounded down. For instance, if you have 10 cards, you would reduce to 5 and if you had 11 cards you would also reduce to 5. With 12 cards you would reduce to 6. Write a program that asks the user to enter how many cards they have and print out what their hand would reduce to under this rule.

3. Write a program that asks the user to enter a positive integer. Then generate a random number between that number and 10 more than that number and print the letter A that many times on the same line.

```
num = int(input("Enter a positive integer: "))  
while num <= 0:  
    num = int(input("Enter a positive integer: "))  
    print(f"{num} is positive.")
```

4. This is a very simple billing program. Ask the user for a starting hour and ending hour, both given in 24-hour format (e.g., 1 pm is 13, 2 pm is 14, etc.). The charge to use the service is \$5.50 per hour. Print out the user's total bill. You can assume that the service will be used for at least 1 hour and never more than 23 hours. Be careful to take care of the case that the starting hour is before midnight and the ending time is after midnight.

```
def dice(n):  
    x=random.randint(1,6)  
    y=random.randint(1,6)  
    for i in range(n):  
        z=x+y  
    return z
```