

Daksh Pote 122B1D052

## DAA ASSIGNMENT NO. 1

### Code:

```
def square(x):if
    x < 10:
        return x * x

    n = len(str(x))
    mid = n // 2

    a = x // (10 ** mid)
    b = x % (10 ** mid)

    # Recursive calls
    a2 = square(a) b2
    = square(b)
    ab = square(a + b) - a2 - b2

    return a2 * (10 ** (2 * mid)) + ab * (10 ** mid) + b2n

= int(input("Enter a number: "))
print("Square is " + str(square(n)))
```

### Output:

```
PS D:\OneDrive\Desktop\python> python DAA1.pyEnter a
number: 1234
Square is 1522756
PS D:\OneDrive\Desktop\python>
```