

Recursion

Instructor: Krishna Mahavadi

- **Recursion:**

A function calling itself to solve a simple form of the same problem.

- **Recursive Function:**

Base Case – terminate case

Iterative Step – What the function should do in each step

Example

```
int r(int n)
{
    if(n < 100)
        return n % 10;

    return 10 * r(n/100) + n % 10;
}
```

```
int main()
{
    int x;
    cin >> x;
    cout << r(x);

    return 0;
}
```