

Algorithms and Data Structures

Compulsory 1

The Git-Hub Link to my repository:

<https://github.com/Shrimpy02/Compulsory1-Algorithms-and-Data-Structures.git>

Recursive coding is a good way of coding recurring actions without relying on prebuilt functionality. It needs a base case and a recursive case looping through the recursive cases until it comes to the simplest form as in this example picture to the right.

```
int sol;  
if(n==1 || n==0)  
    sol = 1;  
  
else{  
    sol = FacRecur(n - 1);  
    sol = n * sol;  
}  
  
return sol;
```

Data structures are a way of storing information, stacks are a good example of a data structure. They can either be dynamic or static, meaning that information can be introduced during running time as well as before. They work best with recursive functions to extract or add information through multiple functions.