

Teacher's Signature

Recursion.

| - | |
|--|--|
| - | The process in which a function call |
| | itself is known as recyrsion. |
| | Secretary Day O providence |
| | (for Example) |
| | Public Static void main (String [] args) |
| | print-num (o) |
| - | \frac{1}{2} |
| Service State of the service of the | Static void Print-nym (int n) |
| Section and section in | $if \mid n = = 8) $ |
| | Systemout printin (n) |
| | returni marina de la |
| | 4. For the allegation of the |
| The residence of the last of t | System out . Println (m) |
| Control of the Contro | printenym (n+2) |
| | |
| | 11 11 12 5 18 18 18 18 18 18 18 18 18 18 18 18 18 |
| | The function will be calling ifself but |
| | which different arguments in our |
| | case. Also, every function call |
| | weill take Seprate memory don |
| | itself that's why we should implemen |
| | Something known as a base Condition |
| _ | 001 KT 11 0 |

| Base Condition |
|--|
| The state of the s |
| The function will stop making |
| recursive Calls if fue Condition |
| is fulfilled a larger vis |
| Land the state of |
| in our case the base Condition is |
| N==8 |
| But what if there's no have |
| Condition ? |
| Well, the Function will keep |
| making recursive calls and the |
| Stack memory will get Filled. |
| This will lead to the |
| Stack over Flow extor |
| |
| Space Complexity of recursion |
| 13 not Constant because of recursive |
| Calls |
| why do we need recursion? |
| (1) It help us in solving complex problem. |
| (2) you can convert recursive solution into iteration |
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| Teacher's Signature Smalling |