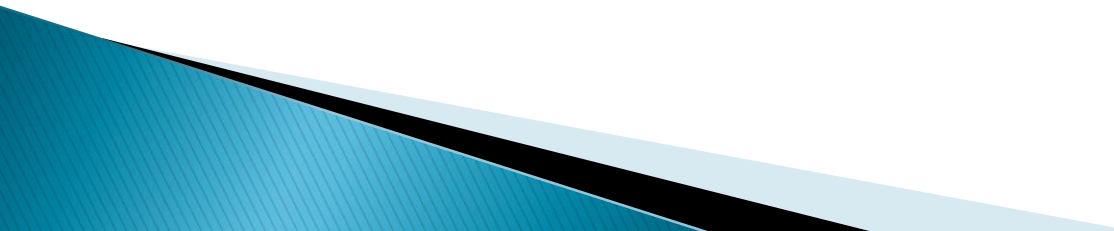


S05 – DS

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S05 – Content

- ▶ Disk and plane
 - ▶ Stack
 - ▶ Queue
- 

S05 – Disk an Plane

```
struct disc
{
    float greutate;
    int diametru;
};
```



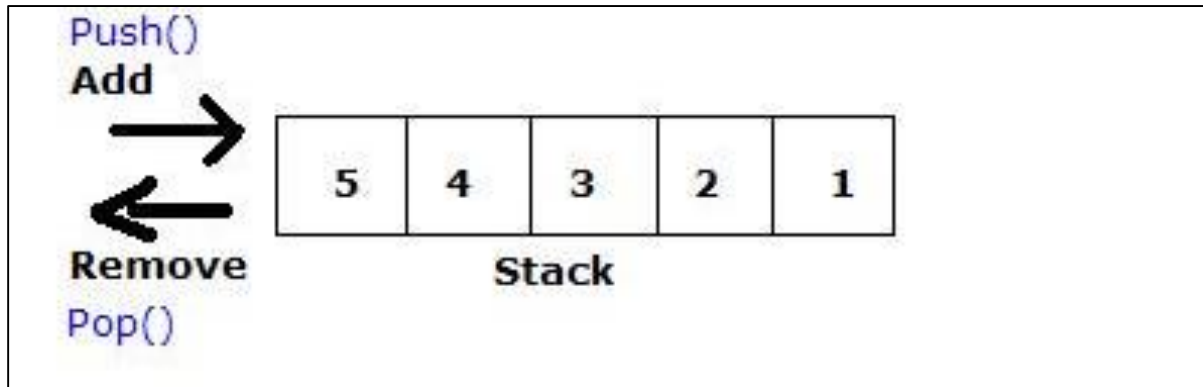
<http://www.sportaddict.ro/>

```
struct avion
{
    char *model;
    int lungime;
    int nr_locuri;
};
```



www.boletosdeavioneconomicos.com/

S05 - Stack



<http://www.c-sharpcorner.com/>

S05 - Stack

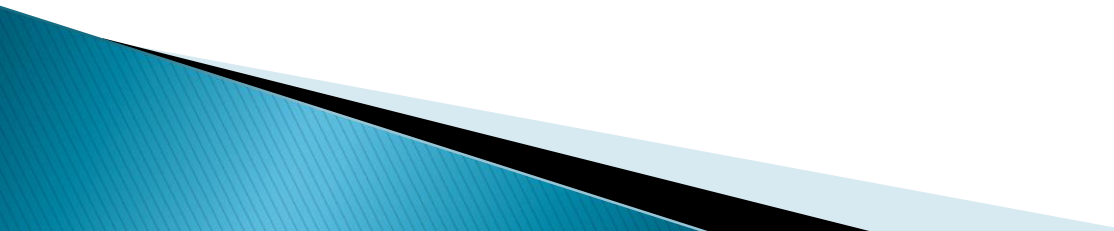


S05 - Stack

The stack is a **last in, first out** structure.

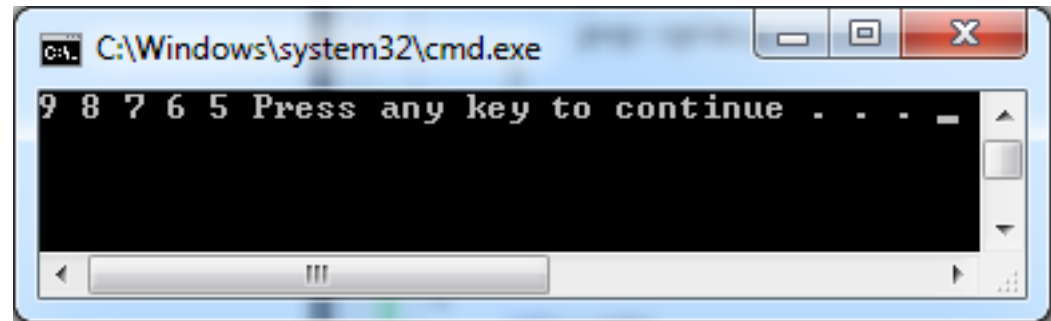


S05 – Stack

- ▶ Write methods to work with a simple linked list structure, so as to respect the principle of stack.
 - ▶ Use an array.
 - ▶ Use a doubly linked list.
- 

S05 – Stack – Recursivity

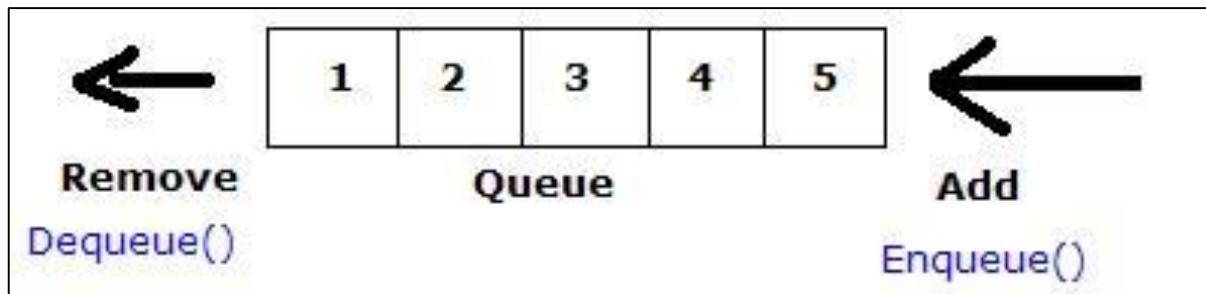
```
void metoda(int x)
{
    if(x<10)
    {
        metoda(x+1);
        printf("%d ",x);
    }
}
```



A screenshot of a Windows command prompt window. The title bar reads "C:\Windows\system32\cmd.exe". The command prompt shows the output of the recursive function: "9 8 7 6 5 Press any key to continue . . .". The numbers 9, 8, 7, 6, and 5 are printed in descending order, followed by the prompt "Press any key to continue . . .".

The call: metoda(5);

S05 - Queue

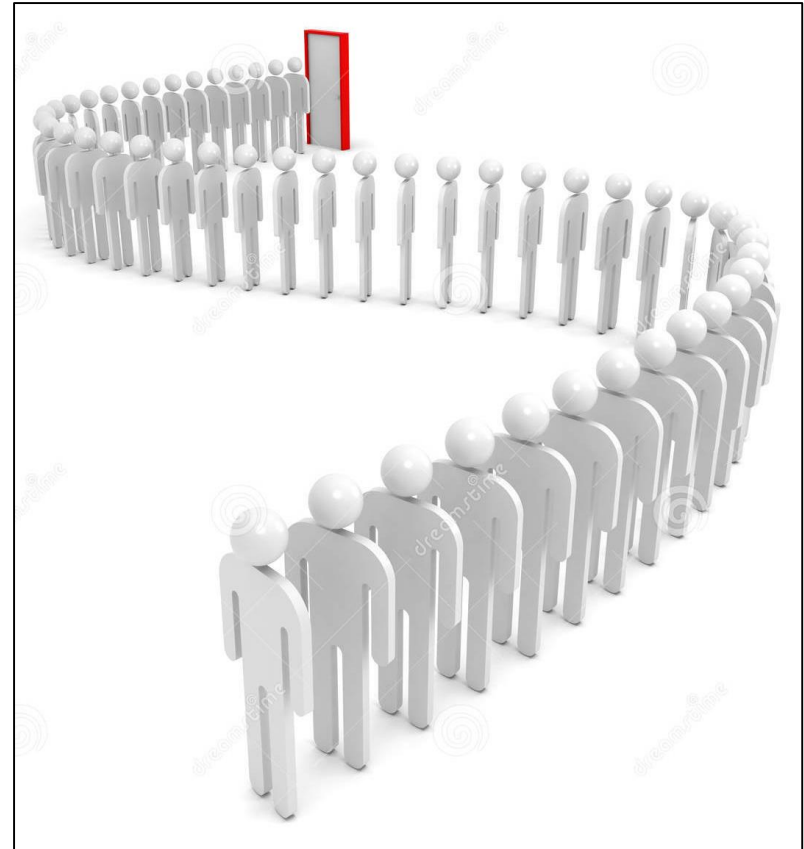


<http://www.c-sharpcorner.com/>

S05 – Coadă



<http://www.theguardian.com/>



<http://www.dreamstime.com/>

S05 – Queue

- ▶ Write methods to work with a simple linked list structure, so as to respect the principle of queue.
 - ▶ Use an array.
 - ▶ Use a doubly linked list.
- 