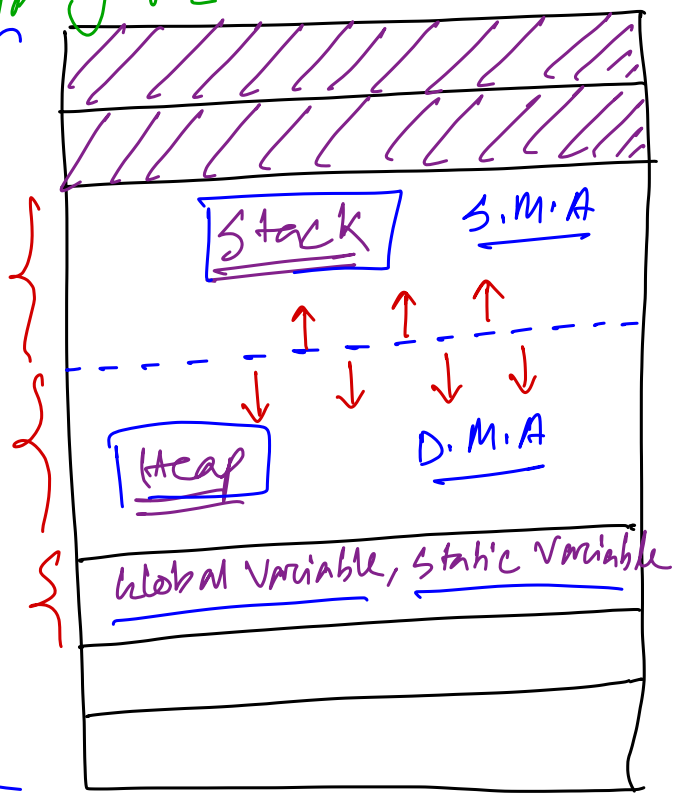
Statically typing P.L.

int c;

c = 10

memory layout



x = 20
print (type(x))
<int>

x = 20.2
<float>

Dynamically Typing P.L.

x = True
<bool>

Var x = 20

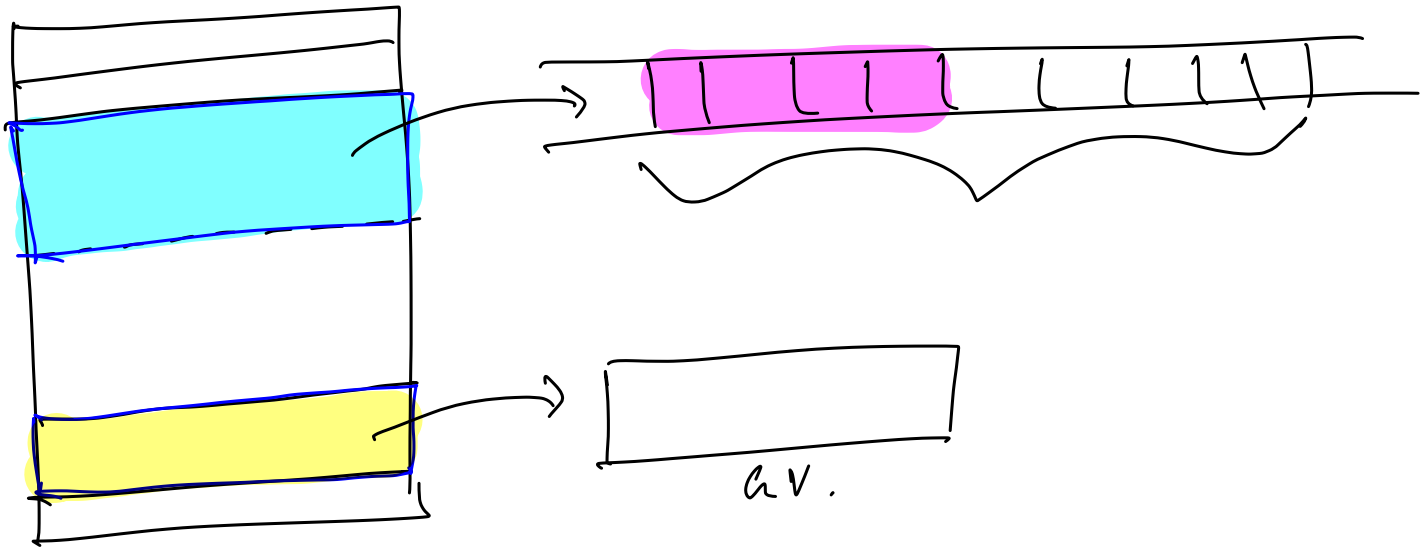
int

Storage classes

auto, Extern, Static,

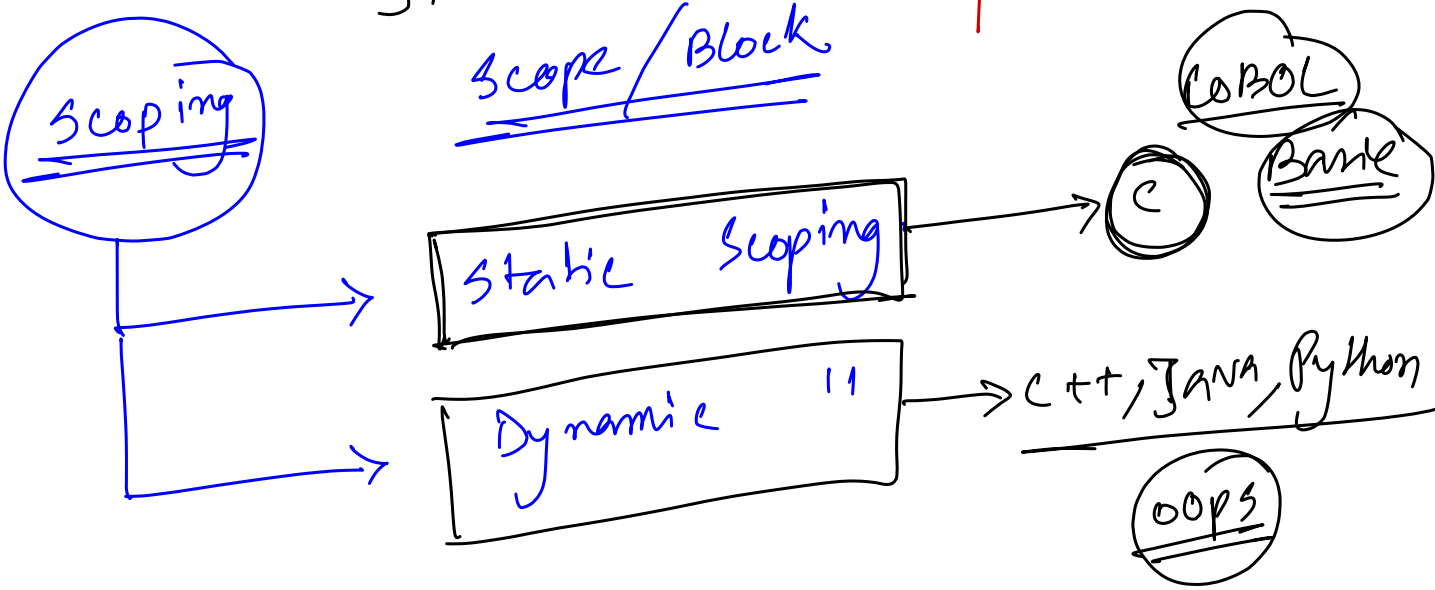
Stack

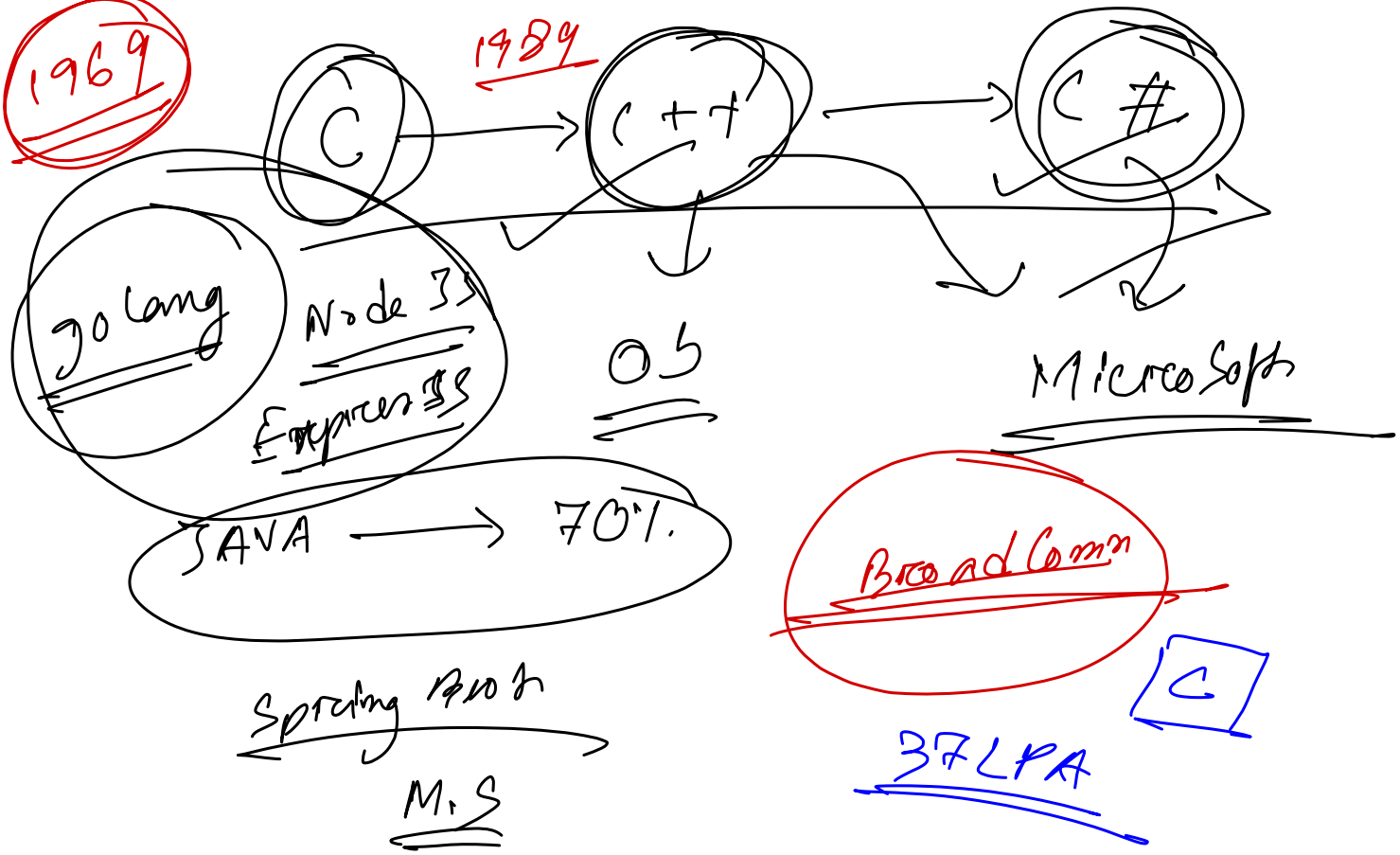
Heap



```
int a = 10;
int main(){
    int a = 20;
    printf("%d", a);
    abc()
    return 0;
}
```

```
void abc(){
    printf("%d", a);
}
```






```c
#include <stdio.h>
// bdw global variables is initialised by 0 by default
int a;
void func1()
{
    printf("\n*******************************\n\tInside Func1\n*******************************\n");
    printf("a = %d\n", a); // 0
    a = 20;                // global variable a =20
}
void func2()
{
    printf("\n*******************************\n\tInside Func2\n*******************************\n");
    printf("a = %d\n", a); // 20
    int a = 45;
    printf("Local a = %d\n", a); // 45
    a *= 2;
    printf("After modifying a = %d\n", a); // 90
}
void func3()
{
    int a = 34;
    printf("\n*******************************\n\tInside Func3\n*******************************\n");
    printf("a = %d\n", a); // 34
    {
        extern int a;
        printf("extern a = %d\n", a); // 20
    }
}
int main()
{
    printf("\n*******************************\n\tInside Main\n*******************************\n");
    int a = 10;
    printf("a = %d\n", a); // 10
    func1();
    func2();
    func3();
    return 0;
}
```