

```
struct Register{  
    string name;  
    pair<int,int> loc;  
};
```

8 bytes

4+4 bytes

16 bytes

```
...  
vector<Register> registers;  
...  
for(Register r : registers){  
    r.loc = make_pair(...);  
}
```

cache line (block) of 128 bytes

name1	loc1	loc1
name2	loc2	loc2
name3	loc3	loc3
name4	loc4	loc4
name5	loc5	loc5
name6	loc6	loc6
name7	loc7	loc7
name8	loc8	loc8

4 bytes

50% unused cache data