

# OM46 classBoard

~~C~~  
~~DS~~

Apti

DCN

OOpc c++

BD and AI

DAC --> C++

Lecture

Lab

==>B

7

oop --> 2000+ -->C++

C --> C++ -->OOP

int main()

{

✓//--

✓//--

✓//---

✓printMessage();

✓//--

✓//--

→ printMessage();

✓//--

→ printMessage();

→ printMessage();

→ printMessage();

return 0;

}

FAR

void printMessage()

✓printf("\n Good morning ....");

✓printf("\n Hello .. OM46 ... :)");

}

✓void printValue(int n) => printValue@int ✓

✓void printValue(char ch) => printValue@char ✓

✓void printValue(int n1,int n2) => printValue@int,int

✓void printValue(int n,char ch) => printValue@int,char

✓void printValue(char ch,int n) => printValue@char,int }

emp

name

empid

sal

age

mgr

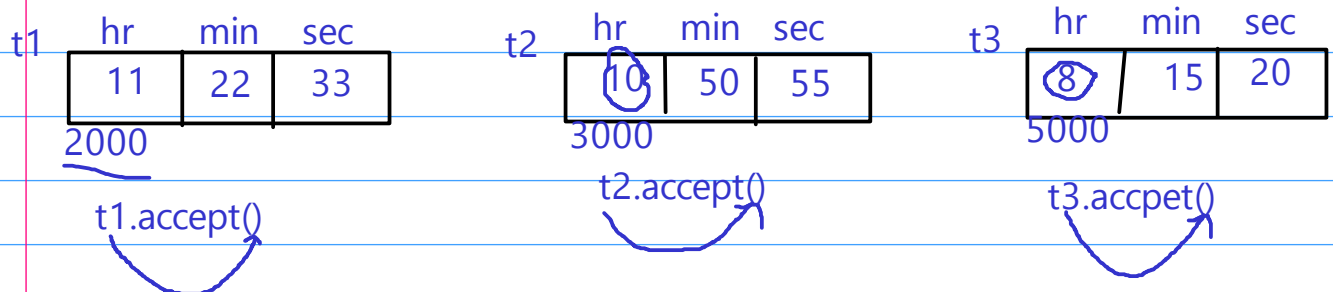
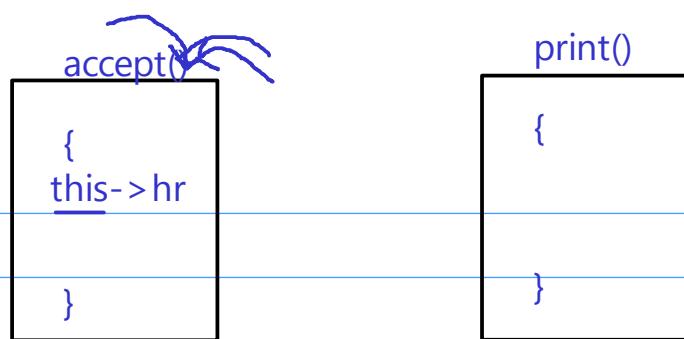
roll\_no

time

hr ✓

min ✓

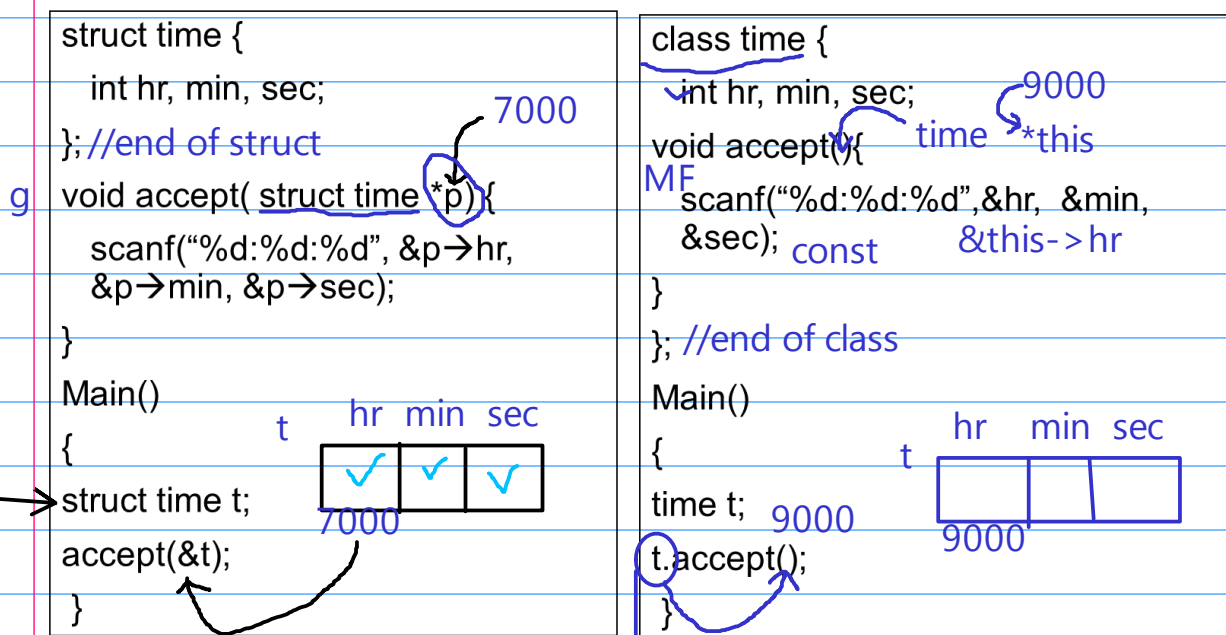
sec ✓



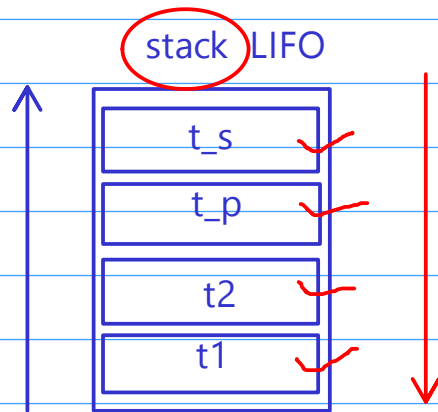
this -> java, c++, c#  
self -> py, objC

C

C++



current/ calling obj



ref  
new - delete  
deep - shallow

day 4  
f/b  
oop\_cpp\_quiz-1

3  
1:concept ✓  
2:app ✓  
3:req ✓

int n1;  
n1=5  
n1=10  
int& ref=n1;  
ref=15  
cout->n1==>15  
cout->ref==>15

n1 ref  
15  
5000

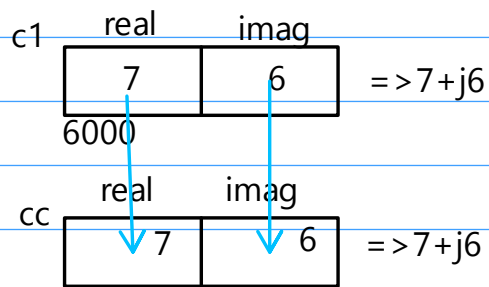
int -> interger type data type  
int\* -> interger pointer type datatype  
int& -> interger ref type datatype

```
//int a1=a
//int& b1=b
void mySwap(int a1,int& b1) {
    int temp = a1;
    a1=b1;
    b1=temp;
}

int main() {
    int a=11,b=99;
    cout<<"\n before swap a="<<a<<" b="<<b;
    mySwap(a,b);
    cout<<"\n after swap a="<<a<<" b="<<b;
}
```

by ref

by value



$$n3 = n1 + n2$$

```

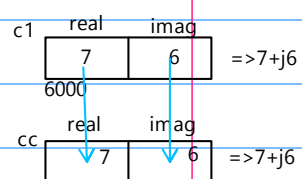
class complex
{
public:
    sum(✓ complex& c2)
    {
        7
        this->real+c2.real;
        this->imag+c2.imag;
    }
}
  
```

```

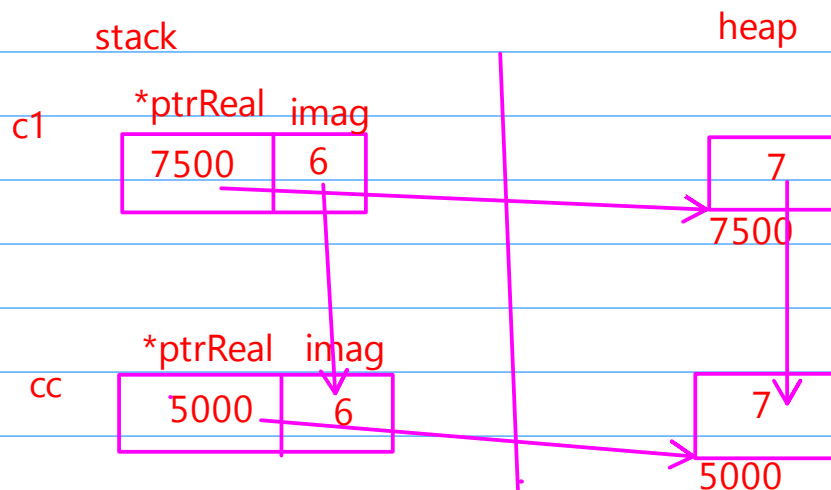
main()
{
    complex c1(7,6)
    complex c2(3,2)
    complex c3;

    c3 = c1.sum(c2)
}
  
```

old case  
shallow



New case deep



6=>10Q 1=20Q  
 5th -> oops  
 6th -> inheritance  
 7th -> adv, exp,temp,mcq ==>20

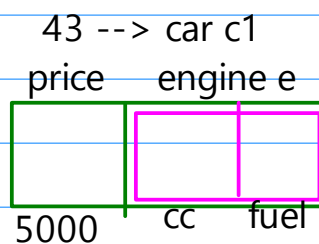
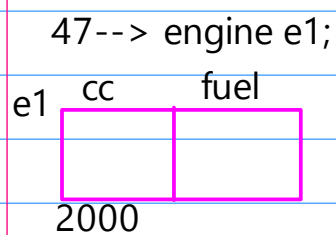
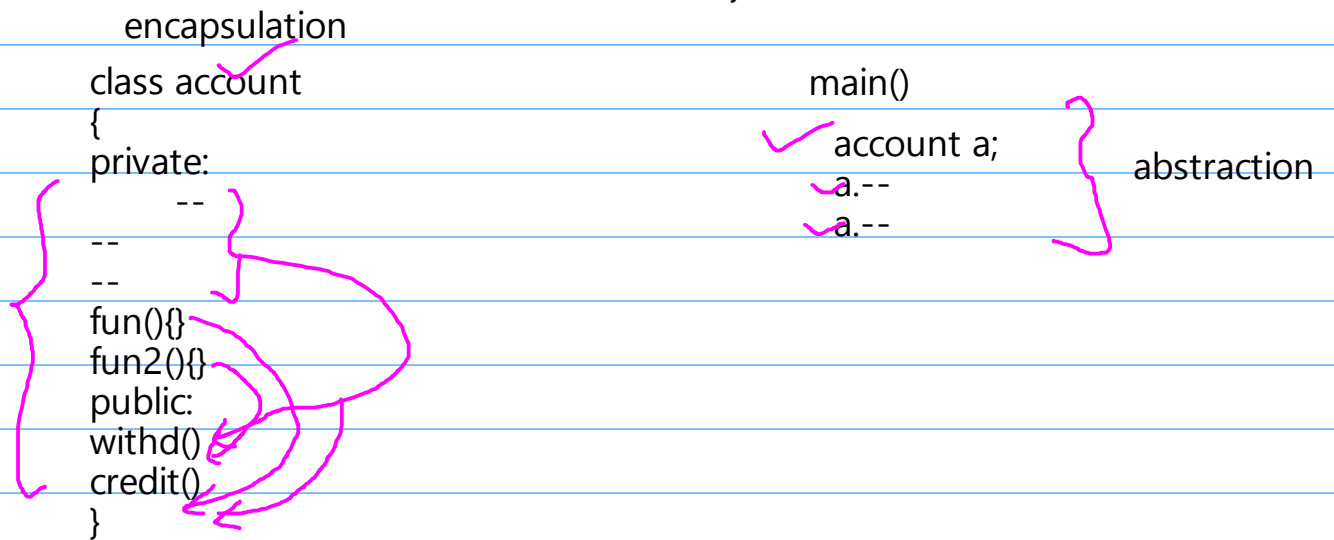
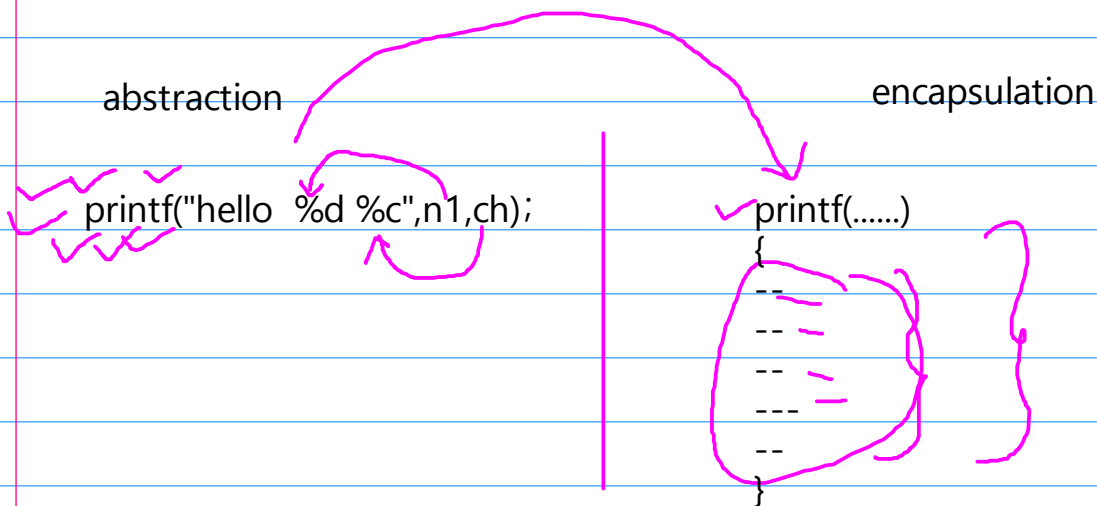
value of count=0 address of count=0x4e2008

n1 + - n2

t1+t2

c1+c2

p++ ✓



time  
-hr  
-min  
-sec

complex  
-real  
-imag

car  
-e  
-price

engine  
-fuel  
-cc

```
class base{};
class derived : public base {}
```

// base , parent      emp is-a person      //derived , child

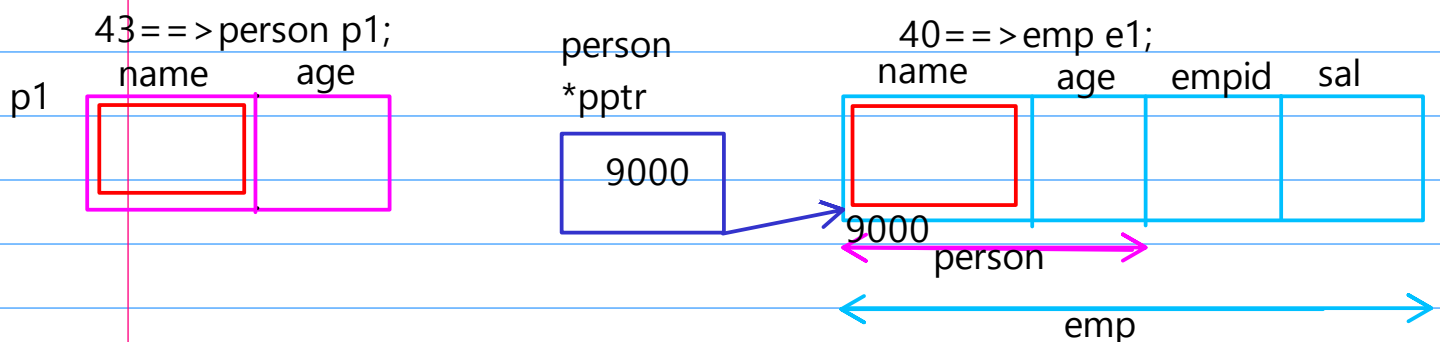
```

person
{
  - name
  - age
  +printPerson()
}

emp : public person
{
  -empid
  -sal
  +printEmp()
  updateName()
}

```

DM=>4  
MF=>3  
mb=>7



```
int n1  int* ptr1=NULL  ptr1=&n1;
char ch  char* ptr2=NULL  ptr2=&ch;
ptr1=&ch; //error
```

```
person p1;  person *pptr=NULL;  pptr=&p1;
emp e1;  emp *eptr=NULL;  eptr = &e1;
```

```
emp e1;  person *pptr=NULL;
pptr=&e1; //no error
```

