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LAB EXERCISE 1

EXERCISE 1 : ADT and Class

1. false
2. true
3. false
4. false
5. true
6. true
7. true
8. false
9. false
10. true
11. false
12. true
13. true

EXERCISE 4 : PASS BY VALUE

a)calc() ->passing by value

b)

Value of Num 1 = 8

Value of Num 2 = -3

Value of Num 1 = 10

Value of Num 2 = 2

No. 1 in function = 8

No. 2 in function = -3

c)void calc(number &n)

d)

Value of Num 1 = 8

Value of Num 2 = -3

Value of Num 1 = 10

Value of Num 2 = 2

No. 1 in function = 10

No. 2 in function = 2

LAB 1 : CONSTRUCTOR

```
//Program 2.26
//date.cpp
//constructor with default argument
#include <iostream>
#include <string>
using namespace std;

class date{
	int day,year;
	string month;
	public :
		//constructor with default argument
		//constructor must have the same name as class name
		date(int a=1,string b="January", int c=2008);
		void print();

};
//costructor implementation
date::date(int a,string b, int c){
	day=a;
	month=b;
	year=c;
}
void date::print()
{
	cout<<"\nThe date is : "<<day<<"-"<<month<<"="<<year;
}
int main()
{
	date birthDate;
	birthDate.print();
	date bday1(26,"July",2000);
	bday1.print();
	date bday2(26,"May",2000);
	bday2.print();
	date bday3(1,"March",2000);
	bday3.print();

}
```

LAB 2 : CLASS AND OVERLOAD CONSTRUCTOR

```
//Program 2.27
//date2.cpp
//overload constructor
#include <iostream>
#include <string>
using namespace std;
class date{
	int day,year,month;
	string month2;
	public:
		//overload constructor definition
		date();
		date(int a);
		date(int a, string b, int c, int d);
		void print();
		void printDate();
};
//constructor implementation
date::date(int a){
	day=31;
	month=8;
	month2="August";
	year=a;
}
date::date(int a, string b, int c , int d){
	day=a;
	month2=b;
	month=c;
	year=d;

void date::print(){
	cout<<"\nDate is : "<<day<<"-"<<month<<"-"<<year;
}
void date::printDate(){
	cout<<"\nDate is : "<<day<<"-"<<month2<<"-"<<year;
}
int main()
{
	date NationalDay(2019);
	NationalDay.print();
	NationalDay.printDate();
	//declare instance of date using default argument
	date TeachersDay(16,"May",5,2020);
	TeachersDay.print();
	TeachersDay.printDate();
	return 0;
}
```