gradeup

Prep Smart. Score Better.

Previous Year UGC-NET Questions

ABOUT ME : NAVNEET GUPTA

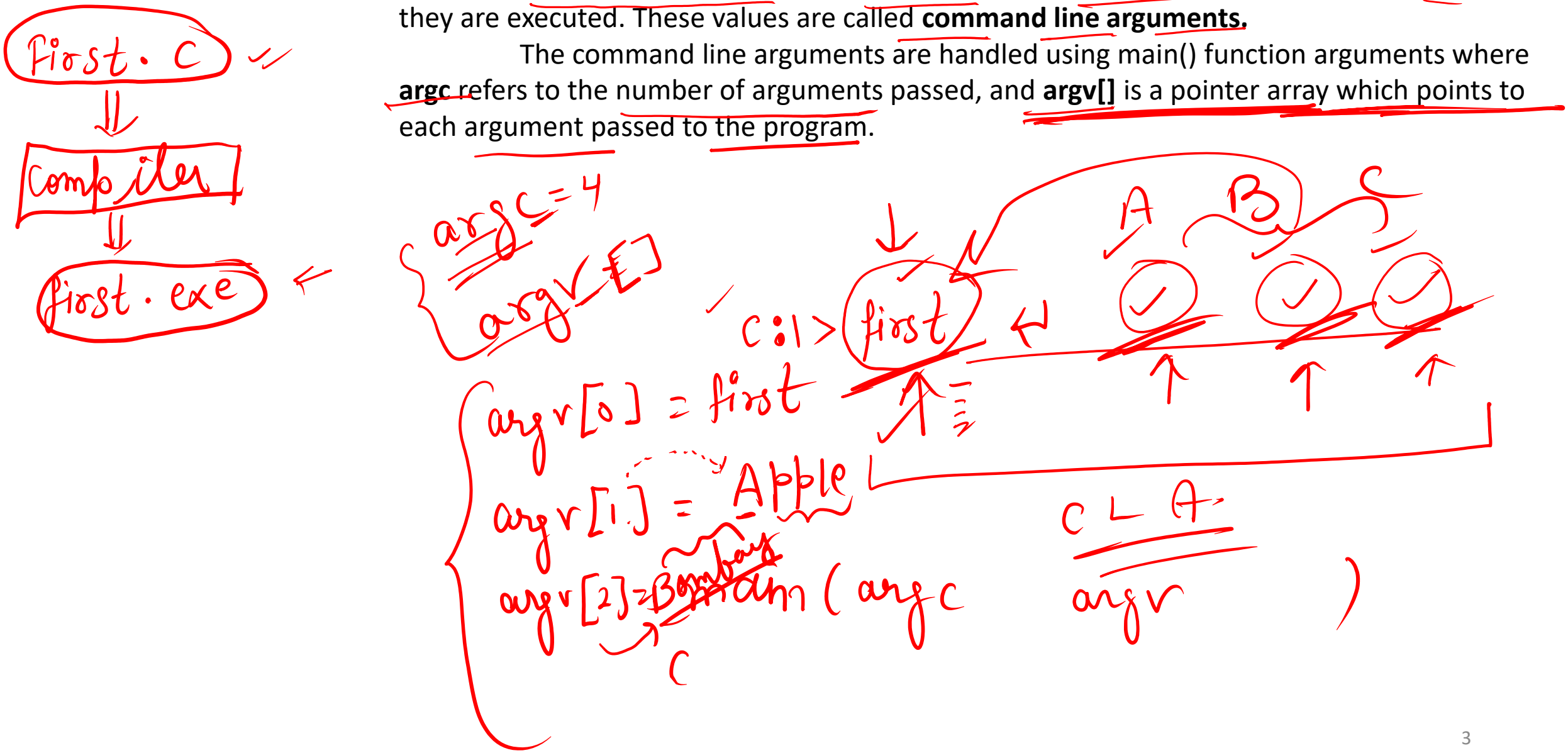
- 8 years teaching experience.
- AIR 92 in GATE 2008
- Qualified UGC-NET 2012, Raj.-SET 2012, CSIR-Recruitment-Exam in 2011
- Achieved 3rd Rank in NPTEL-DBMS Course
- Achieved Silver Medal in CSIR on ERP Project in 2013
- Area of Expertise : DBMS, Programming, Algorithms, Discrete Math, Computer Networks, Operating system

gradeup
Prep Smart. Score Better.

Command Line Arguments

It is possible to pass some values from the command line to your C programs when they are executed. These values are called **command line arguments.**

The command line arguments are handled using main() function arguments where **argc** refers to the number of arguments passed, and **argv[]** is a pointer array which points to each argument passed to the program.



gradeup
Prep Smart. Score Better.

Example:

first.c

FS

```
main ( int argc , char *argr [ ]
{
  if (argc == 2)
    pf ("2 arguments passed");
  else if (argc < 2)
    pf ("only 1 argument is passed");
  else
    pf ("more than 2 arguments passed");
}
```

*argr [ ]

Array of pointers (addresses)

C:\> first Aish Rai

argc = 3

*argr [0] → first

*argr [1] → Aish

*argr [2] → Rai

o/p

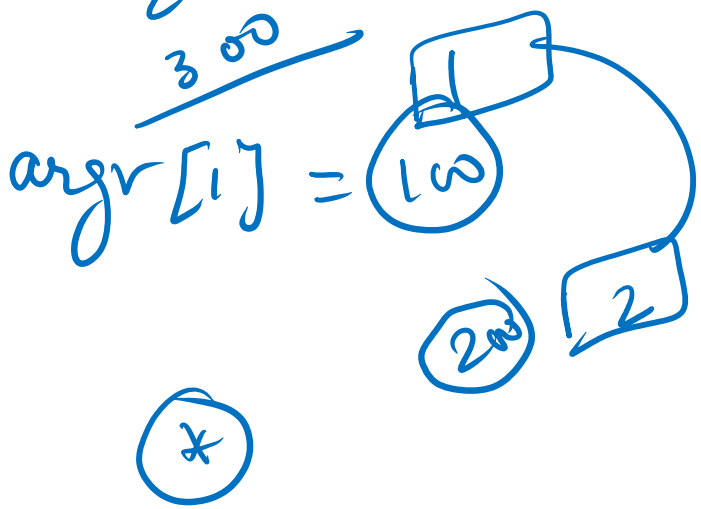
more than 2 arguments passed.

gradeup
Prep Smart. Score Better.

(UGCNET-dec2009-ii-12) What would be the output of the following program, if run from the command line as "myprog 1 2 3"?

```
main (int argc, char * argv[ ])
{ int i ;
i = argv[1] + argv[2] + argv[3] ;
printf ("% d", i) ;
}
```

(A) 123
(B) 6
(C) Error
(D) "123"



gradeup
Prep Smart. Score Better.

(UGC net August 2016 PP2 No 12) The following 'C' statement :

int * f[ ]( );

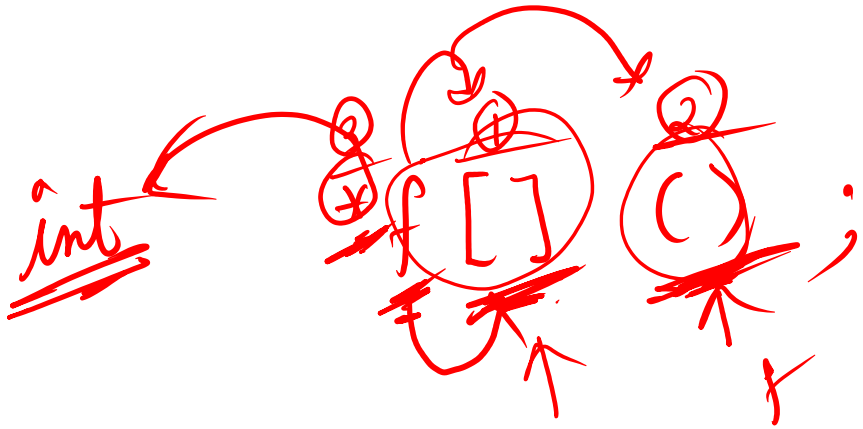
declares :

(A) A function returning a pointer to an array of integers.

(B) Array of functions returning pointers to integers.

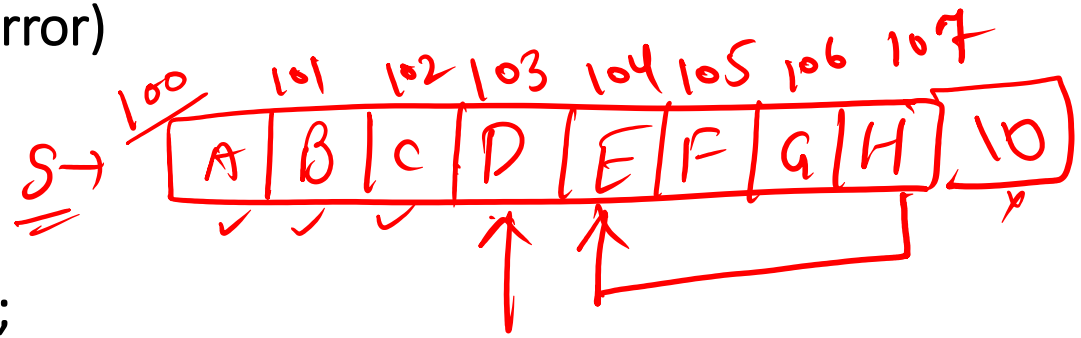
(C) A function returning an array of pointers to integers.

(D) An illegal statement.



gradeup
Prep Smart. Score Better.

3 (UGCNET-June2015-II-11) What is the output of the following program ?
(Assume that the appropriate pre-processor directives are included and there is no syntax error)



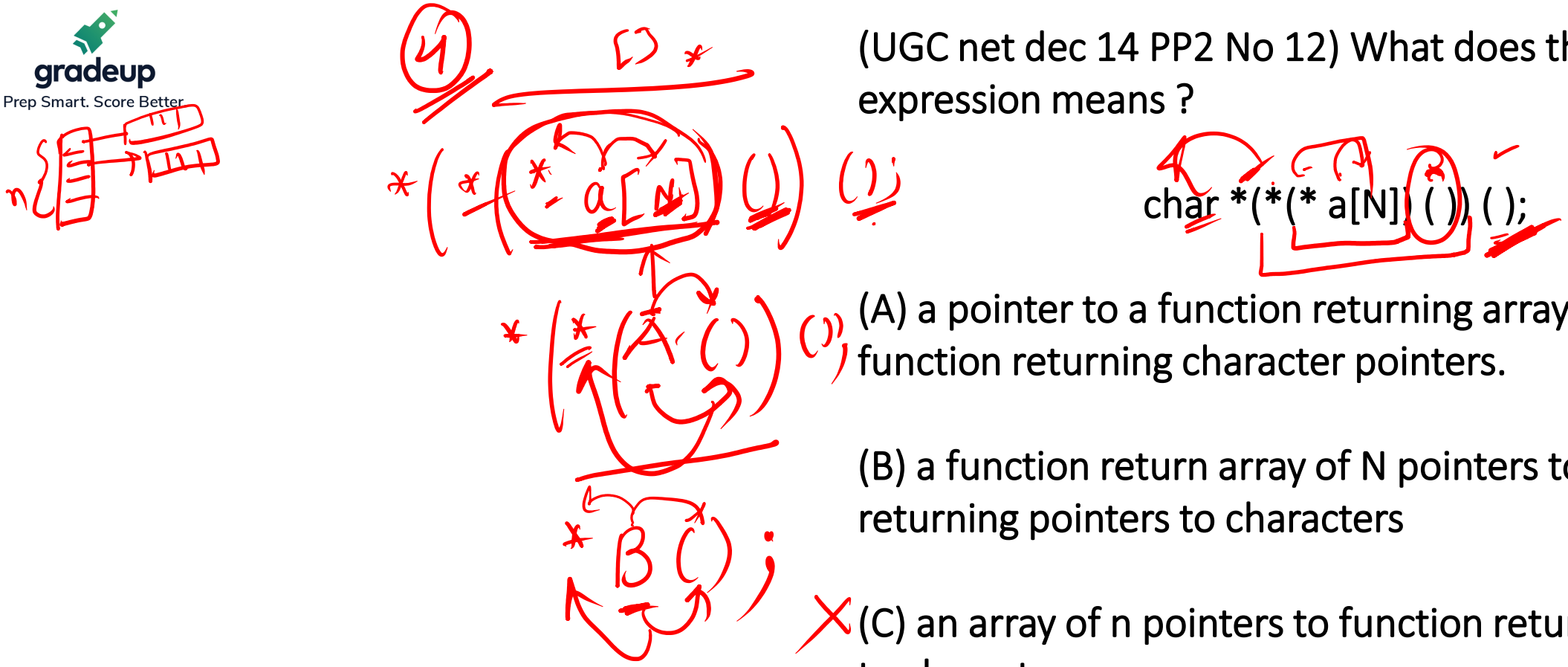

```
main()
{
char S[ ] = "ABCDEFGH";
printf ("%C", *(& S[3]));
printf ("%s", S+4);
printf ("%u", S);
/* Base address of S is 1000 */ }
```

100 + 4 * 1

DEFGH + 104 =

(A) ABCDEFGH1000
(B) CDEFGH1000
(C) DDEFGHH1000
(D) DEFGH1000

gradeup
Prep Smart. Score Better



(UGC net dec 14 PP2 No 12) What does the following expression means ?

char *(*(* a[N])( ))( );

(A) a pointer to a function returning array of n pointers to function returning character pointers.

(B) a function return array of N pointers to functions returning pointers to characters

(C) an array of n pointers to function returning pointers to characters

(D) an array of n pointers to function returning pointers to functions returning pointers to characters.

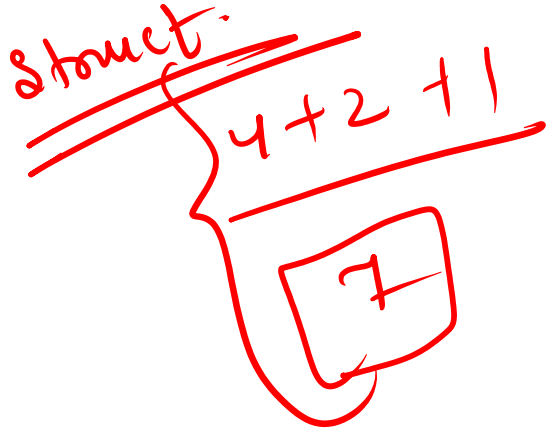
gradeup
Prep Smart. Score Better.

(UGCNET-Sep2013-II-33) What is the size of the following Union ?

Assume that the size of int = 2, size of float = 4, size of char = 1

```
union tag {
int a;
float b;
char c;
};
```

(A) 2
(B) 4
(C) 1
(D) 7

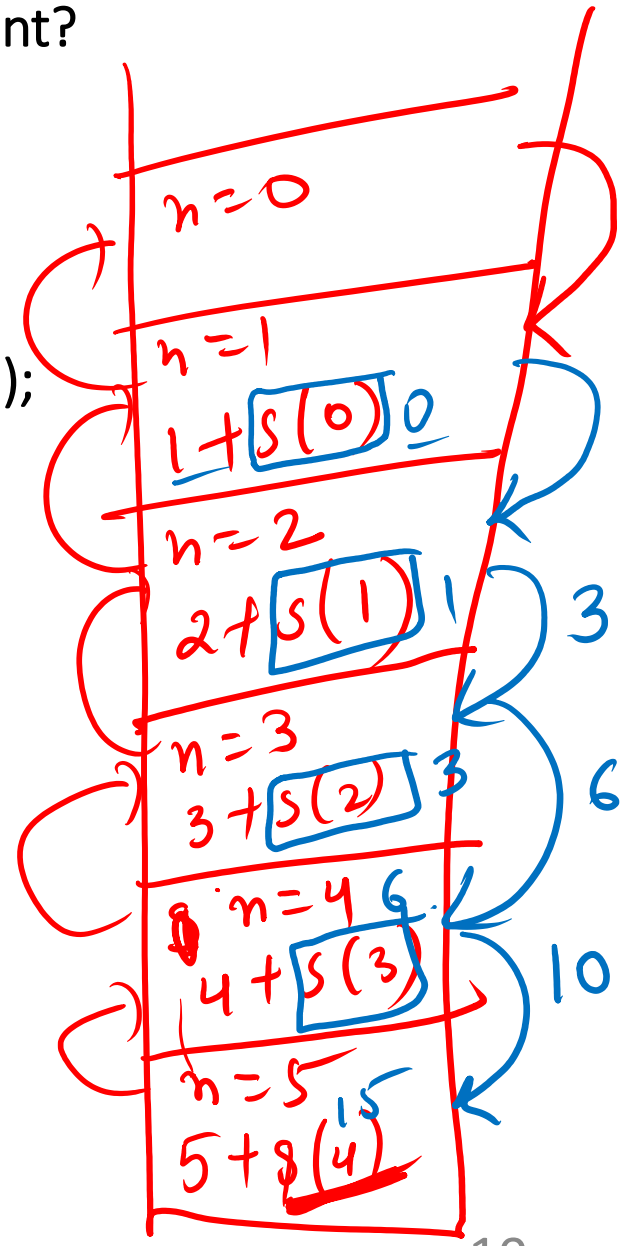


gradeup
Prep Smart. Score Better.

6) (UGCNET-Sep2013-II-34) What is the output of the following program segment?

```
sum(n)
{
if ( n < 1 ) return n;
else return (n + sum(n–1));
}
main()
{
printf("%d", sum(5));
}
```

(A) 10
(B) 16
(C) 15
(D) 14

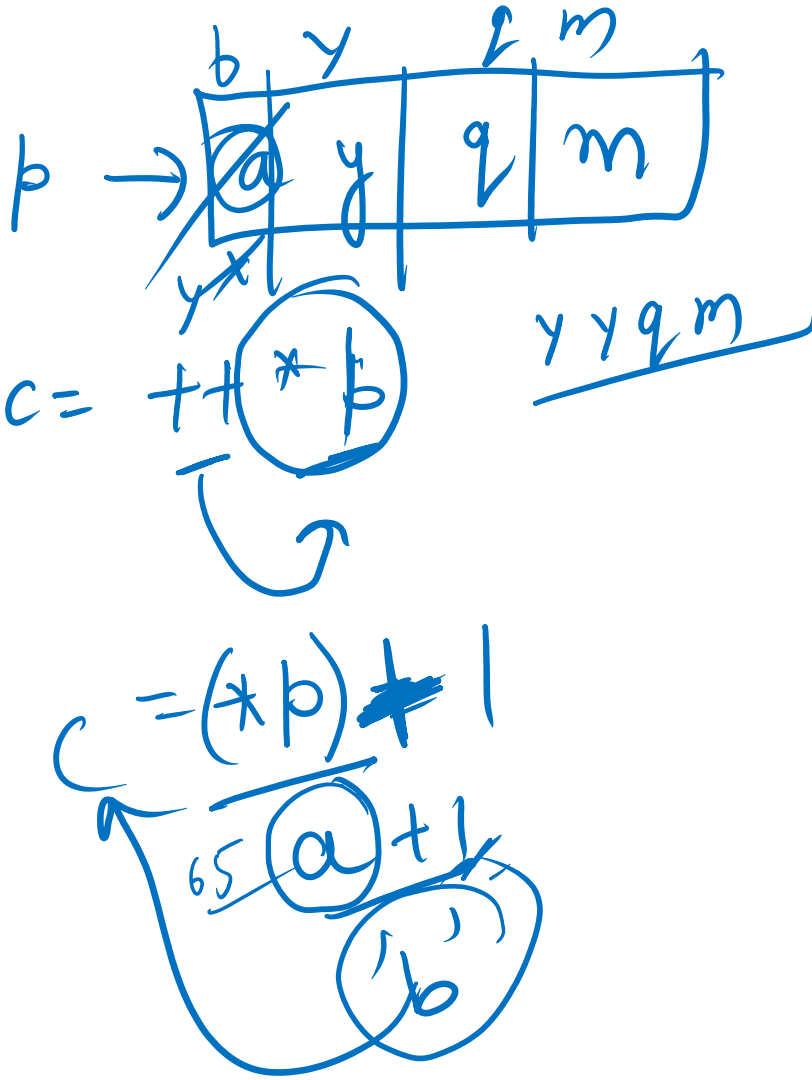


gradeup
Prep Smart. Score Better.

7) (UGCNET-June2010-II-12) What will be the output of the following c-code?

```
void main ( )
{
char *P = "ayqm" ;
char c;
c = ++*p ;
printf ("%c", c);
}
```

(A) a
(B) c
(C) b
(D) q



gradeup
Prep Smart. Score Better.

8) (UGC NET 2008 PP No 12) Consider the following declaration in C:

```
char a[];
char *p;
```

C

Which of the following statement is not a valid statement?

(A) p=a;
(B) p=a+2;
(C) a=p;
(D) p=&a[2];

array is not a variable but pointer is a variable

p = a
p = &a
p = a+2

p = &a[2]

a = p

gradeup
Prep Smart. Score Better.

9) The following statement in 'C'

```
int(*f())[];
```

Declares

(A) a function returning a pointer to an array of integers.

(B) a function returning an array of pointers to integers.

(C) array of functions returning pointers to integers.

(D) an illegal statement.

int (*f())[];

gradeup
Prep Smart. Score Better.

10) Trace the error:

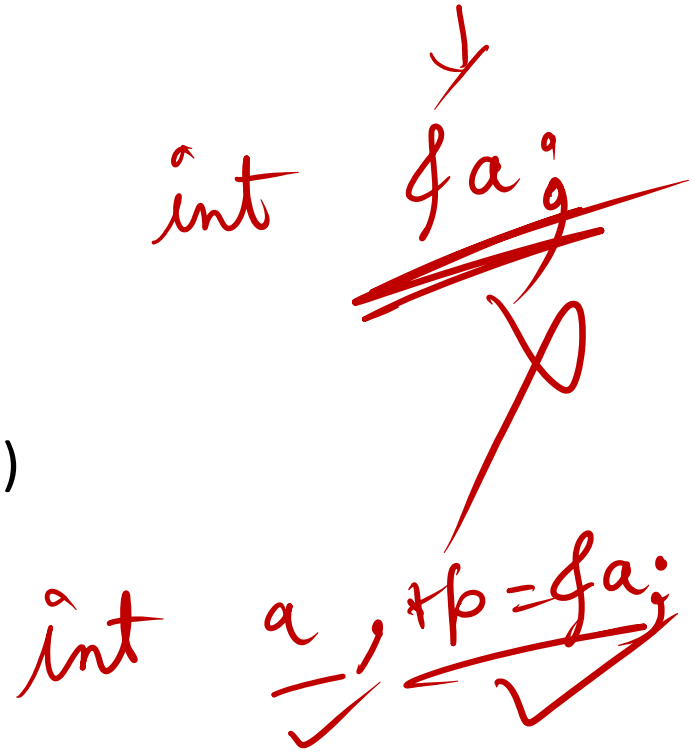
```
void main( )
{
int *b, &a;
*b = 20
printf("%d, %d", a, *b)
}
```

(A) No error

(B) Logical error

(C) Syntax error

(D) Semantic error



gradeup
Prep Smart. Score Better.

11. Consider the following two C++ programs P1 and P2 and two statements S1 and S2 about these programs:

P1	P2

void f (int a, int *b, int &c)
{ a = 1;
*b = 2;
c = 3;
}
int main()
{ int i = 0;
f(i, &i, i);
cout << i;
}
	double a = 1, b = 2;
	double &f(double &d)
	{ d = 4;
	return b;
	}
	int main()
	{
	f(a) = 5;
	cout << a << ":" << b;
	}

S1 : P1 prints out 3

S2 : P2 prints out 4 : 2

What can you say about the statements S1 and S2 ?

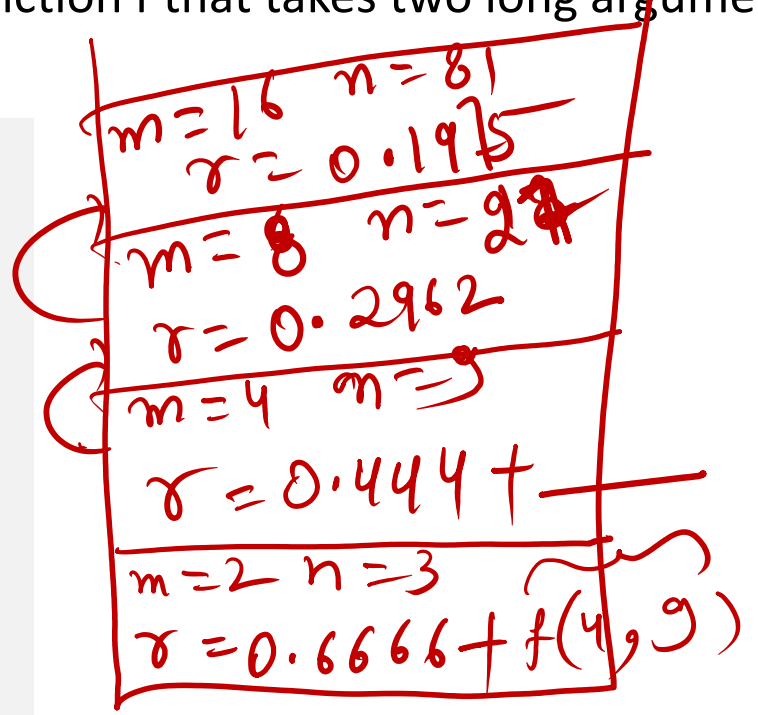
A. Only S1 is true.
B. Only S2 is true.
C. Both S1 and S2 are true.
D. Neither S1 nor S2 is true.

gradeup
Prep Smart. Score Better.

UGC-2016

12. Consider the following recursive Java function f that takes two long arguments and returns a float value:

```
public static float f(long m, long n)
{
float result = (float) m/ (float) n;
if (m < 0 || n < 0)
return o.of;
else
result += f(m*2, n* 3);
result result;
}
```



Which of the following integers best approximates the value of f(2, 3) ?

A. 0

B. 3

C. ~~1~~

D. 2

0.6666 + 0.444 + 0.2962 + 0.1975 + 0.13168 + 0.08779 + 0.0390 + 0.0173 + 0.0115 + ...

gradeup
Prep Smart. Score Better.

13. Which of the following is correct?

A. Base class pointer object cannot point to a derived class object (F)
B. Derived class pointer object cannot point to a base class object (T)
C. A derived class cannot have pointer objects (F)
D. A base class cannot have pointer objects (F)

gradeup
Prep Smart. Score Better.

14. Out of the following, which is not a member of the class?

A. Static function
B. Friend function
C. Constant function
D. Virtual function

gradeup
Prep Smart. Score Better.

15. What is the other name used for functions inside a class?

A. Member variables

B. Member functions

C. Class functions

D. Class variables

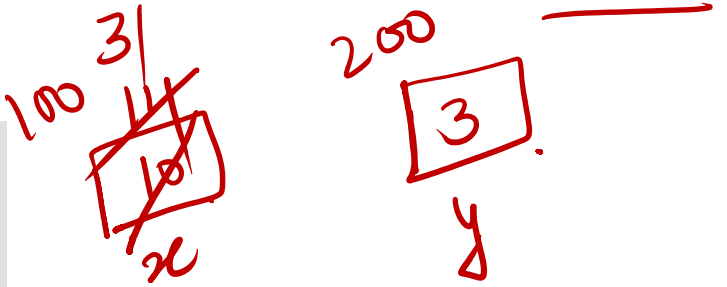
gradeup
Prep Smart. Score Better.

16. What is printed by the print statements in the program P1 assuming call by reference parameter passing?

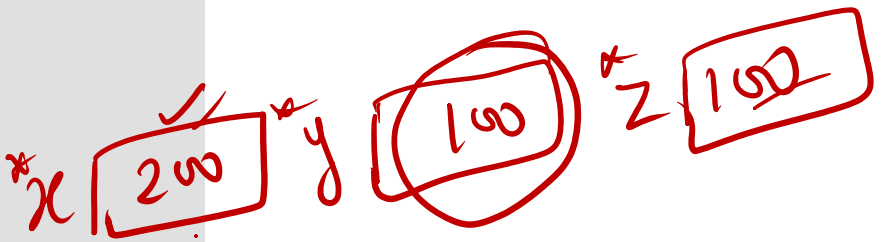
```
Program P1()
{
    x = 10;
    y = 3;
    func1(y,x,x);
    print x;
    print y;
}
func1(x,y,z)
{
    y = y+4;
    z = x+y+z;
}
```

x = 31

y = 3



f1(200, 100, 100)



*y = *y + 4

*z = *x + *y + *z

3 + 14 + 14

31

gradeup
Prep Smart. Score Better.

17. Which of the following cannot be used with the virtual keyword?

A. Class
B. Member functions
C. Constructors
D. Destructors

gradeup
Prep Smart. Score Better.

18. Syntax of entity declaration is _____

A. <!entity name “value”>

B. <entity name “value”!>

C. <”value” entity name>

D. <!”value” entity name>

gradeup
Prep Smart. Score Better.

19. Which of the following is not a type of Constructor?

A. Friend constructor
B. Copy constructor
C. Default constructor
D. Parameterized constructor

gradeup
Prep Smart. Score Better.

20. How run-time polymorphisms are implemented in C++?

A. Using Inheritance
B. Using Virtual functions
C. Using Templates
D. Using Inheritance and Virtual functions

gradeup
Prep Smart. Score Better.

21. Which of the following is an abstract data type?

A. int
B. float
C. class
D. string

C

gradeup
Prep Smart. Score Better.

Ans = 2016

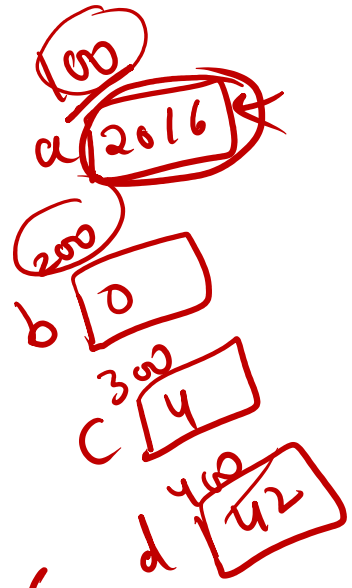
22. Consider the C Code:-

```
#include<stdio.h>
void mystery(int *ptra, int *ptrb)
{
int *temp;
temp = ptrb;
ptrb = ptra;
ptra = temp;
}
int main()
{
        int a=2016, b=0, c=4, d=42;
    mystery(&a, &b);
    if (a < c)
      mystery(&c, &a);
    mystery(&a, &d);
    printf("%d\n", a);
}
```

ptra = 200
ptrb = 100
Addr

temp = 100

2016 < 4 F



The output of the program 2016

gradeup
Prep Smart. Score Better.

Subject Completed


Best
Of
Luck