Comp 133,forms mid

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The value of **x** in the following expression:

A) 2.500000

B) 2

c) 2.000000

d)Error

- int main() {

-     double x = (float)(5/2);

-      return 0;

- }

5/2=2
int/int=int

(float) 2=2.000

The following is (are) considered a C programming <mark>run-time</mark> error:

A) <mark>Division by zero</mark>

B) Forgetting to close an open bracket

C) Using the wrong equation to calculate a value

D) All of the above

Run-time error

سيعمل البرنامج ولكن لن يقوم بتنفيذ شيء

syntax errors

اغلاق لن يعمل البرنامج لانه شرط اساسي بنهايه الفنكشن {}

logical errors

كما اريد بسبب تضهر قيم ولكن ليس خطأ استخدامي عمليه حسابيه

The output of the following code segment is:

A)Hello
B)Hi
C)HelloHi
d)None

```
int x = 1
switch(x)
{ case 1:
  printf("Hello");
default:
printf(" Hi");
}
```

بسبب عدم وجود
Break
هذا تقوم بتنفيذ الجملتين

Output is: Hello Hi

What is the value of balance after the following code is executed?

A)1
B)infinte loop
C)-1
D)none

```
int balance = 10;
while (balance > 1) {
if (balance < 9) {
continue;
}
balance = balance - 9; }
```

عندما يكون
Balance
سوف يدخل 1اكثر من
الحلقه

ووظيفه الجمله الشرطيه
If
كل (تجاهل)هو تخطي
الارقام التي اصغر
يبقى فقط هكذا 9 من
Balance=10
هو مخرج الحلقه

Balance=10-9=1

he output of the following code segment is:
A)8
B)6
D)0
C)none

```
int x = 6;
for(; x > 1; x += 2)
if(x % 3)
break;
 printf("%d", x);
```

طالما قيمه المتغير اكبر من 1 سيدخل الحلقه وهنا دخل الحلقه لان قيمته 6 بعدها يفحص اذ كان الشرط يتحقق
اذا تحقق الشرط ستنتهي الحلقه واذا لم يتحقق سيضاف للمتغير 2

الرقم 6باقي قسمته على 3هو 0 والذي يعني
6%3=0(False)
اي لم يتحقق الشرط وهنا سيضاف الرقم 2للمتغير
6+2=8
الرقم 8باقي قسمته على 3هي1
8%3=1(true)
سيدخل الحلقه ويحقق الشرط الذي يوقف الحلقه

How many times is the printf statement executed?
A) 21
b) 15
c) 10
d) none

```c
for(int i=0; i<6; i++)

    for(int j=0; j<i; j++)

        printf("%d ", j * i);
```

I=0,1,2,3,4,5

I=1
J=0

1*0

I=2
J=0,1

2*0
2*1

I=3
J=0,1,2

3*0
3*1
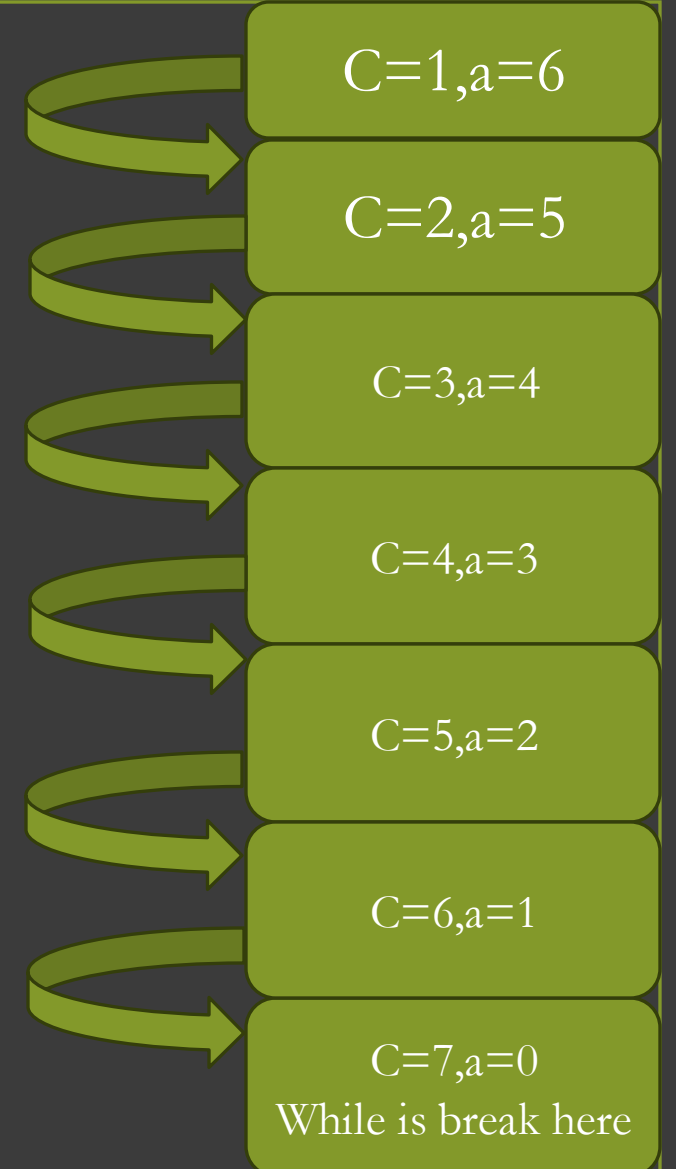3*2

I=4
J=0,1,2,3

4*0
4*1
4*2
4*3

I=5:
j=0,1,2,3,4
:

5*0
5*1
5*2
5*3
5*4

What is the output of the following statement:
printf("%d", c);

A)5
B)6
C)7
D)NONE

```c
int a = 6, c = 1;
do {
c++;
} while (--a > 0);
printf("%d", c);
```

C=1,a=6

C=2,a=5

C=3,a=4

C=4,a=3

C=5,a=2

C=6,a=1

C=7,a=0
While is break here

The following are all legal C variable names except:

A)A2B
B)CONSTANT
)AB
D)1a3

How many times will the following loop be executed?
A)0
B)1
C)100
D)infinite

```c
int x = 1;
while (x >= 100)
{
printf("%d ",x++);
}
```

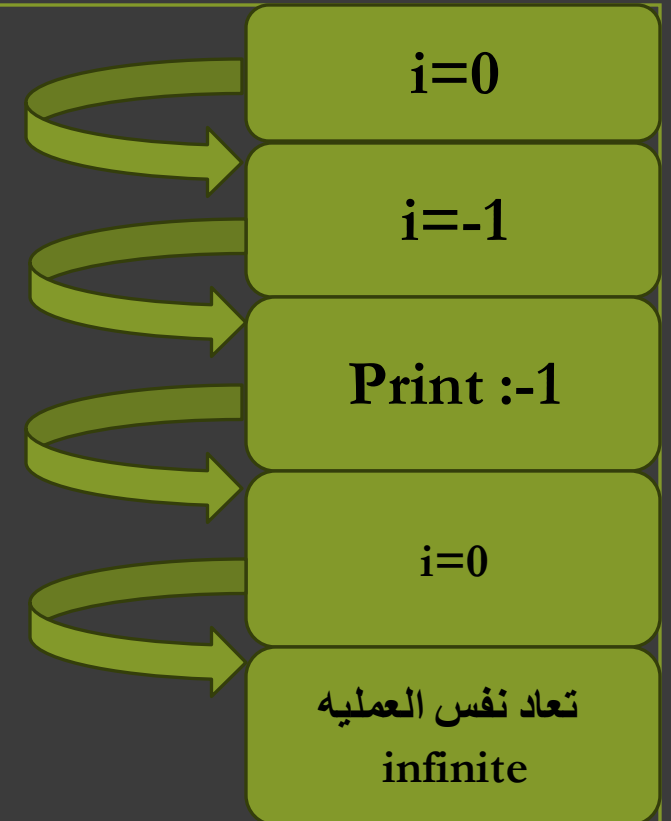# How many times will the following loop run?

A)0
B)1
C)infinite
D)compiler error

```c
int i = 0; do
{
printf("%d", --i);
i++; }
while (i >= 0);
```

i=0

i=-1

Print :-1

i=0

تعاد نفس العمليه
infinite

What is output of the following statement printf("%d",*y);
:
:

A)7
B)20
C)address of x
D)none

```c
int x = 7;
int *y = &x;
x= 20;
 printf("%d\n", *y);
printf("%d\n", y);
printf("%d", &x);
```
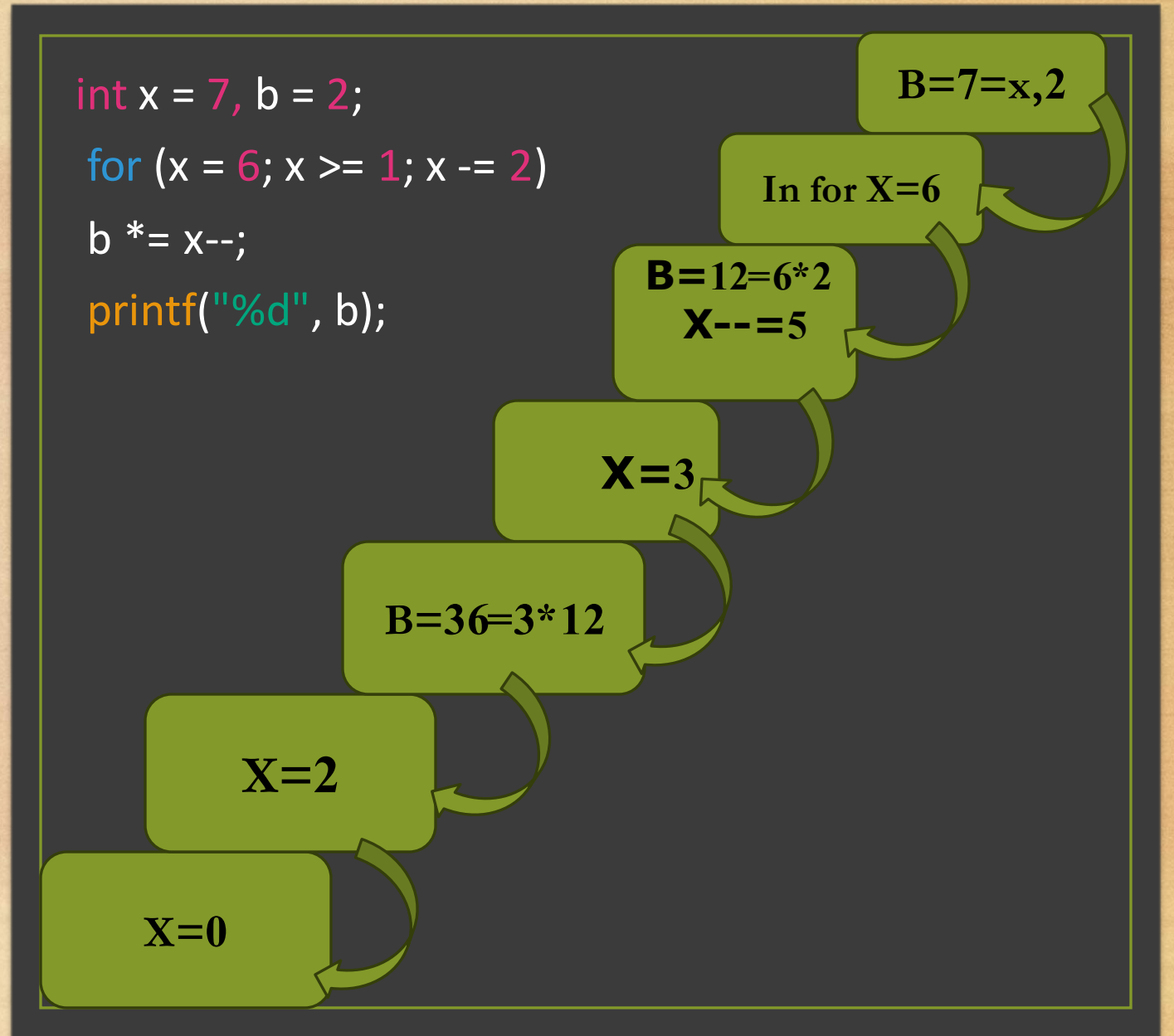
All output is

20
6356728
6356728

What is the out put of following statement printf("%d",b);

A)6
B)20
C)36
D)NONE

```
int x = 7, b = 2;
for (x = 6; x >= 1; x -= 2)
b *= x--;
printf("%d", b);
```

B=7=x,2

In for X=6

B=12=6*2
X--=5

X=3

B=36=3*12

X=2

X=0

WHAT THE VALUE OF N AFTER EXECUTING THE FOLLOWINGE CODE:

A)2
B)5
C)7
D)NONE

```
int n=1;
if(n)
{ n+=3;    // n = 1 + 3 = 4
n/=2;     // n = 4 / 2 = 2
}
Else
n+=4;
n=7;
printf("%d", n);
```

غير تابعه للجمله
الشرطيه
بسبب عدم وجود
{}
بعد
else

In following code, how many times the value of n will be printed on screen:

```c
int n;
for(n=1;n<=10;n++)
printf("%d\n",++n);
```

A)4 times
B)5 times
c)3 times
d)10 times

N=2

N=4

N=6

N=8

N=10

Which of the following statements creates an array of 10 int initialized to values of zero

A)int [10]array=0;
B)int array[10]=0;
C)int array [10]=[0];
D)int array[10]={0};

What is the result after the execution of the following code if **a=10, b=5** and **c=10**?

A)a=5,c=6
B)a=10,c=11
C)none
D)a=11,c=10

```
if ((a > b) && (a < c))
  a = a + 1;

else

c = c + 1;
```

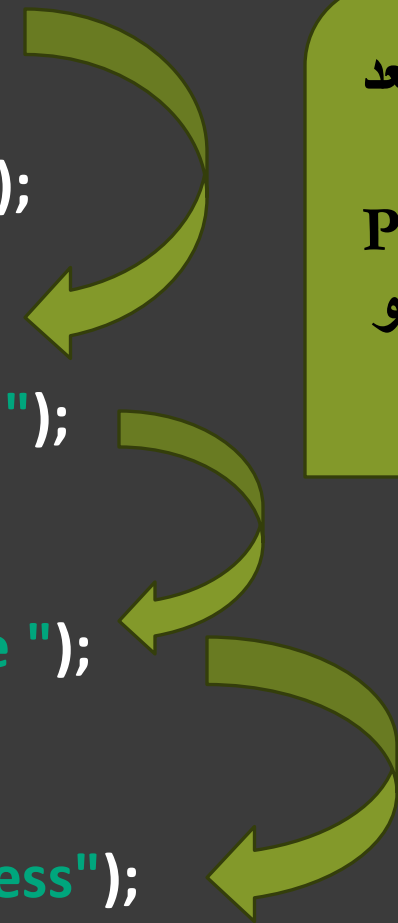T && f = f

a=10

C=c+1=11

What the output of following code

a) Red
b) Black
c) Black White
d) **Black White Colorless**

```c
switch (color)
{ case 'R':
printf("Red ");

    case 'B':
printf("Black ");
    case 'W':

printf("White ");

    default:
printf("Colorless");
}
```

سبب تنفيذ الجمل بعد
Case'B':
Printf("Black")
عدم وضع بعدها هو
Break;

What the output of following code

A)61
B)39
c)none
d)78

```c
int x[5] = {15, 22, 39, 50, 21};

int s = x[5 % 2] + x[2];

printf("The value of s is: %d\n", s);
```

- $x[0] = 15$
- $x[1] = 22$
- $x[2] = 39$
- $x[3] = 50$
- $x[4] = 21$

$X[5\%2]=X[1]=22$
$S=x[1]+x[2]$
$S=22+39=61$

The output is
A)ok 83
B)ok 8
C)ok 80
D)none

```c
int main()
{
int z = 83; if (z >= 90 && z <= 100)    F&&T
{
printf("great\n");
}
else if (z < 60)    f
{ printf("fail\n");

} else if (z >= 60 && z < 90)    T&&T
{ printf("ok %d\n", z / 10 * 10);
}
```

Int/int=int

The value of y is:
a) 3
b) 4
c) error
d) none

```c
#include <math.h>
#include <stdio.h>
 int main()
 {
 int y = (int)ceil(sqrt(12.0));
printf("The value of y is: %d\n", y);
return 0; }
```

sqrt(12.0)=3.46410
Ceil(3.46410)=4

The output is
A) 5 30
B)6 25
C)5 25
D)5 24

```c
int x = 3, n = 6;
if (x = 2)
 x += 2;

  else
x *= 2;
 x *= n--;


Printf("%d  %d",n,x);
```

How many times the statement printf("\n") will get executed?

a) 5
b) 15
c) 2
d) none

```c
for (int i = 0; i < 15; ++i)
{
 printf("%d", i++);
 if (i % 5 == 0)
break;
 printf("\n");
}
```

What the output?
a)5
b)2
c)6
d)none

```
int a=5,c=1;

 Do{


C++;
}while(--a>0);

 printf("%d",c);
```
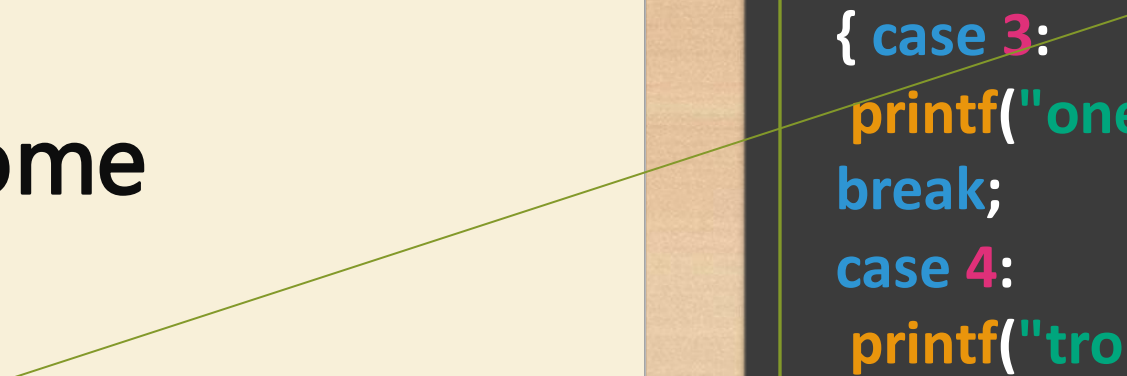
The output is:

a) go home
b) tow
c) error
d) none

```c
int x = 14;
switch (x / 3.0)
{ case 3:
printf("one");
break;
case 4:
 printf("tro");
 break;
case 5:
 printf("hi ");
 break;
default:
 printf("go home"); }
```

The output is:

a) bad
b) nice bad
c) nice
d) none

```c
int x = 10, y = 23, z = 15;
if (x % y > 0  &&  z / 15 || 15 % 2)
 printf("nice.");
Else
printf("bad ");
```

How many times will the following loop be executed??

a) 0
b) 100
c) infinite
d) 1

```c
int x = 1;
while (x <= 100)
{
  printf("%d ", x--);
}
```

Every function prototype must include at least one parameter.

a)true
b)false

What the output of following code segment?

a) 3 3.500000
b) 3 3.00
c) none
d) 3 3.50

```c
int x;
 float y;
x = 7 / 2;    //x=3
 y = 7 / 2;    //y=3.000000

 printf("%d %.6f\n", x, y);
```

What is the output after executing the folowing code fragment

a)5
b)0
c)6
d)none

```c
void f(int x)
{ x = x + 5; }
int main()
{
int x = 5;
f(x);
printf("%d", ++x);
```

Which kind of statement can be nested inside the body of an if statement:

a) if statement
b) for statement
c) while statement
d) all of above