pseudocode questions

Predict the output of the following pseudocode if the value of the number is 6

```
Read number
k = 2
i = 2
while i <= number
      k = k * i
      i = i + 1
end while
write k
```

Predict the output of the following pseudocode

```
Set Integer res = 0

do

--res

display res

res ++

while (res >= 0)

End do-while
```

Predict the output of the following pseudocode

```
Set value = ' '* 10 print value
```

What happens when the below pseudocode is executed?

```
Set integer value = 10

Set integer salary = 0

while (value = 10)

salary = salary + 100

display salary

End while
```

Count the number of "#" printed

```
for m = 0 to 14 do
      for n = 0 to 14 do
             display '#'
      End-for
      if(m = 5) then do
             break
      End-if
End-for
```

What will be the output of the following pseudo code if n = 10?

```
Read n
Initialize i to 5, sum to 0
while i < n do
increase sum by i
increment i
end while
write sum
```

What will be the output of the following pseudo code for i = 140?

```
integer fun(int i)
if((i%2)!=0)
return i;
else
return fun(i=1);
End function fun()
```

```
#include<stdio.h>
int main()
{
int x=2,y=0,z=3;
x>y ?( printf("%d", z)):( return z);
}
```

What will be the output of the following pseudocode?

```
Integer a, b, c, d, e
Set a=50, b=3, c=3 e=0
while(c>0)
d=a mod b
e = e + d + a
c = c - 1
End while
Print e
```

```
for (i = 1; i \le 6; i++)
for (j = i; j < 6; j++)
Print blank space
for (k = 1; k < (i * 2); k++)
Print *
End for
Line break
End for
End for
```

```
Start
Declare a=0, I and b
for I = 0 to 4
Increment a by 1
if I = 3 then
print hello
get out of the loop
End if
End for
print a
```

What will be the output of the following? If we pass input as a = 25, a = 16

```
integer a
if((a mod 10) IS EQUAL TO 0)
a=a*2
else if((a mod 5 ) IS EQUAL TO 0)
a=a/5
else
a=a-1
end if
```

```
integer a, b;
Set a=2; b=50;
while(b>0)
       a = b\%2 + a;
if( a MOD 2 Is Equal To 0)
       Print a
else
       Print b-1
b = b/5
a=a+1
End while
```

```
Integer x, y, z, a

set x = 2, y = 1, z = 5

a = (x AND y) OR (z + 1) // bitwise

print a
```

What will be the value of the following pseudo code if the value of the n is 35

```
read n
i = 0
while n%10 != 0
n = n+3
i++
end while
n = n + 1
```

What will be the value of the following pseudocode?

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What will be the value of the following?

```
Integer p
String str1
Set str1 = "Infosys"
p = stringLength(str1)
Print (p^1)
```

What will be the value of the following?

```
Integer x,y, z

Set x = 8, y = 6, z = 12

If (z < x OR (x + y) > (y-x))

x = 6 + y

Endif

Print x + y + z
```

```
Integer val
Set val = 10
do{
val - -
- val
} while (val - - >10)
Print val
```

```
#include<stdio.h>
int main()
int i = 5, j = 4;
if(!printf(""))
printf("%d%d",i,j);
else
printf("%d%d",i++,++j);
return 0;
```

What will be the output of the below code when 1 is entered?

```
#include <stdio.h>
int main() {
  int ch;
  printf("Enter the value between 1 to 2");
  scanf("%d",&ch);
  switch(ch, ch+1){
    case 1: printf("1\n"); break;
    case 2: printf("2"); break;
    default: printf("3");}
  return 0;
```

```
#include <stdio.h>
int main () {
char ch;
if(ch= printf(" ")){
  printf ("%d", ch);
  printf ("no output");}
else{
  printf("output");}
return 0;
```

```
#include<stdio.h>
int main()
        int i = 25;
        if(i == 25);
                i = 50;
        if(i == 25)
                i = i+1;
        else
                i = i+2;
        printf("%d",i);
        return 0;
```

```
#include <stdio.h>
#define FALSE -1
#define NULL 0
#define TRUE 1
int main () {
if(NULL)
printf("NULL");
else if(FALSE)
printf("TRUE");
else
printf("FALSE");
return 0;
```

```
#include <stdio.h>
#define hello
int main()
       #ifdef hello
       #define hi 4
       #else
       #define hi 5
       #endif
       printf("%d", hi);
       return 0;
```

```
import static java.lang.System.*;
class _a
  static public void main(String[] __A_V_)
    String $ = "";
    for (int x =0; ++x<__A_V_.length;)
    $ += _A_V_[x];
    out.println($);
```

And the command line: java _a - A .

What will be the output of the following pseudocode?

```
#include <stdio.h>
int main()
int p=15, q=6, r= 4;
  q = !p;
  r != !!p;
  printf("%d%d",q,r);
  return 0;
```

What will be the output of the following pseudocode?

```
Start
Integer p, q, r
Set p = 0, q = 8, r = 4
For each r from 5 to 8
       Set q = 5 + 12 + p
       If (r - q - p) < (3 - r) Then
              Set p = q + p
       Else
              Set q = p
       End If
End For
Print p + q
End
```

What will be the output of the following pseudocode? If the value of p=5, q=10, r=15

```
void fun(Integer p, Integer q, Integer r)
p = p >> 1
q = q >> 1
r= r>>1
p = p >> 1
q = q >> 1
r = r > 1
Print p+q+r
End function fun()
```

What will be the output of the following pseudocode?

```
Integer p,q,r
Set p=1, q=5, r=10
if((r-q+p) > (p+r))
p=q+p
End if
if((r-7)<(7+r))
p=(r+r)+p
r=p+q
End if
Print p+q+r
```

What will be the output of the following pseudocode for a

```
= 4, b = 4, c = 7?
                      Integer myfun(integer a, integer b, integer c)
                             for(each c from 3 to 5)
                             a = (c + c)^b
                             if((a+c) < (c+a))
                             b = (a + 11) + c
                             else
                             c = b+b;
                             a = 3 + b
                             continue
                            endif
                      End for
                      Return a + b
```

What will be the output of the following pseudocode for a = 7, b = 4?

integer myfun(integer a, integer b) integer c set c = a + a + b + bb = c + c + b + ba = b-areturn a + b

end function myfun()

```
#include <stdio.h>
int main()
int a = 1, b = 2;
a += b -= a;
printf("%d%d", a, b);
return 0;
```

```
integer a,b,c
set a = 0, b = 1, c = 2
if(b^c | | a&b | | a>>1)
c = 9
a = b + c
else
c = 1
a = a + c
endif
print a+b+c
```

```
What will be the output of the following pseudocode for a = 2,
b = 6?
        integer myfun(integer a, integer b)
        if (a>0)
         if(b>0)
        return a+b+myfun(a+1, 0)+myfun(a+2,0)+myfun(a+3,0)
         endif
        endif
        return a+b
        end function myfun()
```

```
integer p, q, r
set p = 3, q = 1, r = 2
if (p+(2\&2\&2)) AND q+(3\&3\&3) AND r+(2^2^2)
      p = p-2
      q = p
else
P = r
q = q^2
end if
print p +q +r
```

```
What will be the output of the following code?
           enum A{one=1, two=9, three };
           enum B{dog =1, cat, bird};
            int main()
           enum Bx = bird;
           enum A y = three;
           x << = 3;
           printf("%d",x^y);
           return 0;
```

What will be the output of the depicted pseudo code for a = 6, b = 4 and c = 6

integer myfun(integer a, integer b, integer c) for (each c from 3 to 6)

b = c+b

end for

return a+b

```
What will be the output of the following pseudocode if str1 =
INFOSYS, a = 0, b = 6?
void fun(char str1, int a, int b)
     char temp
     temp = str1[a]
     str1[a] = str1[b-a]
     str1[b-a] = temp
     if (a Equals (b/2)
     return
     end if
     fun(str1, a+1, b)
end function fun()
```

```
integer x, y, z
x = -3, y = 0
if(y-2<2)
       for(each z from 0 to (3-2))
       x = x + (y-3)
       end for
end if
if(1)
       for (each z from 0 to (3-2))
       x = x + (y + 5)
       end for
end if
print x +y
```

What will be the value returned by given function if n = 10?

```
int sum(int n)
     if(n !=2)
     return n+sum(n-2);
     else
     return n;
```

```
Integer b,c, d,e, f
C = 22, d = 52, e = 13
For(each b from 1 to 3)
      f = (c+d)/e
      if(f\%13 == 0)
      e = ((e+f)-(c-10)) + b
      else
      d = d+b+f
End for
Print e, d
```

```
integer j
integer arr[4] = \{3,1,4,2\}
if((arr[2] & arr[0]& arr[3])<(6-arr[3]-arr[2]))
 arr[1] = (arr[0]+5) + arr[0]
end if
if((arr[0]+ arr[3])< arr[3])
 arr[2] = 5 + arr[1]
end if
arr[2] = (arr[3] + 4) + arr[3]
print arr[0] + arr[2]
```

```
integer j
integer arr[4] = {1,2,3,5}
arr[2] = (arr[1]& arr[0]) & arr[0]
for(each j from 4 to 5)
arr[j mod 3] = (arr[3]+3)+arr[2]
arr[j mod 3] = 4 + arr[1]
end for
print arr[2] + arr[3]
```

```
What will be the output of the following pseudocode for a = 1,
b = 2?
            integer myfun(integer a, integer b)
            if(a<3 and b<4)
            return myfun(a+1, b+1)
            else
            return a+b
            end if
```

end function myfunction ()

```
int m = 2, c = 1;
int n, a, b, limit = 10;
while (c < limit)
  for (int n = 1; n < m; ++n)
    a = m * m - n * n;
    b = 2 * m * n;
    c = m * m + n * n;
    if (c > limit)
       break;
    printf("%d %d %d", a, b, c);
  m++;
```

What will be the output of the following pseudocode for input a =30, b =60, c =90?

```
Integer a, b, c, sum
Read a, b, c
Set sum = a + b + c
if ((sum EQUALS 180) and (a NOT EQUALS 0) and (b NOT
EQUALS 0) and (c NOT EQUALS 0))
  Print "Success"
otherwise
  Print "Fail"
End if
```

```
BEGIN
SET a = 10
  IF (a++ > 10) THEN
    PRINT "true"
  END IF
  PRINT "false"
  PRINT "ABC"
END
```

Predict the output of the following pseudocode if p = 15 and q = 4

```
Integer solve (Integer p, Integer q)
Integer value
while(q)
 value = p MOD q
 p = q
 q = value
End while
return p
End function solve ()
```

```
Integer p, q, r, s

Set p = 4, q = 2, r = 1

s = (p AND q) OR (r + 1) // bitwise operator

Print s
```

What will be the output of the following program?

```
void main()
int i = 5, j = 2;
junk ( i, j ) ;
printf ( "\n%d %d", i, j );
junk (int i, int j)
i = i * i;
j = j * j;
```

```
int main(){
int c = 5, no = 1000;
do
no /=c;
} while (c--);
printf("%d\n", no);
return 0;
```

```
int main()
{
   int i = 7, *j, k;
   j = &i;
   printf("%d\n", i * *j * i + *j);
   return 0;
}
```

```
BEGIN
  INTEGER p, q, r
  SET p = 2, q = 5
  q = p + q
  FOR r FROM q TO 8 DO
  q = p * 2
  END FOR
  IF p > q AND 2 > 2 THEN
  q = 0
  ELSE
  q = 1
  END IF
PRINT p + q + r
END
```

What will be the output of the depicted pseudocode?

```
integer pp, qq, rr
set pp = 9, qq = 6, rr = 5
if(pp>qq && (rr+qq)<(qq-rr))
 rr = (4+5) + pp
if((rr&7&qq)>(7&rr))
 pp = (rr+pp)^r
Else
pp = rr
End if
  Else
rr = qq+rr
End if
rr = 12 + qq
print pp +qq + rr
```

What will be the output of the following pseudocode for input 7?

- 1. Read the value of N
- 2. Set m = 1, T = 0
- 3. If m>N
- 4. Go to line no.9
- 5. Else
- 6. t = t + m
- 7. m = m + 1
- 8. Go to line no. 3
- 9. Display the value of T
- 10. Stop

```
#include <stdio.h>
int x = 0;
int f() {
if (x == 0)
return x + 1;
Else
return x - 1; }
int g() {
return x++; }
int main()
int i = (f() + g()) | g(); //bitwise or
int j = g() | (f() + g()); //bitwise or
printf("%d",j);
```

```
// value for k = 3 and j = 4
Integer myfunc(integer k, integer j)
if(k equals 1 OR k equals 0)
     return 1
else
     return myfunc(k-1, j-1) + myfunc (k-2, j+3)
end if
end function myfunc
```

```
// a = 10, b = 11
Integer Myfunn( integer a, integer b)
if (0)
return a-b-Myfunn(-7,-1)
end if
a = a+a+a+a
return a
End function Myfunn()
```

```
Integer myfunc(integer a, integer b, integer c)
set a = 3, b = 5
for(each c from 3 o 4)
b = 2 & c
if((b+a)<(a-b))
a = c + a
endif
end for
return a+b
```

```
Int p, q, r
Set p = 0, q = 10, r = 7
If((r +q-p)> (p +r))
        r = p & q
End if
Print p +q +r
```

```
int main()
{
int i = 0, j = 2, k = 3, m;
m = (i++ && ++j)|| k++;
printf("%d%d%d%d", i, j, k, m);
return 0;
}
```

```
integer p, q
set p = 19, q = 7
p = p mod (p-3)
q = q mod (q-3)
p = p mod 1
q = q mod 1
print p+q
```

```
integer p, q,r
set p = 5, q = 8, r = 7
If(1<r)
      if(p < q)
             r = (2 \& 3) + q
      End if
      q = 4 + p
End if
p = (p + p) + p
print p+q+r
```

What will be the output of the following?

set int outcome = 6/0 print outcome

What will be the output of the following if val = 250?

```
int val, m, a
set m, a to val
while (m>0)
m = m/10
a = a-m
print a
```

What will be the output of the following pseudocode for a = 8 and b = 9?

```
function(input a, input b)
    if(a<b)
        return function(b , a)
    else if(b !=0)
        return (a + function(a, b-1))
    else
        return 0</pre>
```

```
function(input n)
    if(n ==1)
        return 0
    else
    return (n-1) + function(n-1)
```

```
#include<stdio.h>
int main()
{
printf("%d",sizeof(printf("xplore360"));
return 0;
}
```

```
#include<stdio.h>
int main()
for( int x = 10;x>=0;x--)
     int z = x&(x>>2);
      if(z)
      printf(%d,x);
return 0;
```

Assume that objects of the type short, float and long occupy 2 bytes, 4 bytes and 8 bytes, respectively. The memory requirement for variable t,

```
Struct{
    short s [5]
    union{
      float y;
    long z;
    }u;
}t;
```

```
#include<stdio.h>
int main()
       int i = 0;
switch (i)
       case '0': printf("Hello");
       break;
       case '1': printf("ok");
       break;
       default: printf("bye");
return 0;
```

```
#include<stdio.h>
int main()
int arr[] = \{10,20,30,40,50,60\};
int *ptr1 = arr;
int *ptr2 = arr+5;
printf("%d",(ptr2-ptr1));
printf("%d",(char*)ptr2-(char*)ptr1);
return 0;
```

```
#include<stdio.h>
int main()
{
  char *ptr = "Infosys";
  printf("%c",*&*&*ptr);
  return 0;
}
```

```
#include <stdio.h>
void Myfunction(int *x, int *y) {
  x = y;
  *x = 5;
int main() {
  int i = 0, j = 0;
  Myfunction(&i, &j);
  printf("%d %d\n", i, j);
  return 0;
```

```
#include<stdio.h>
int Myfunction(int x, int *py, int **ppz)
                                               int main()
                                               int c, *b, **a;
int y, z;
**ppz +=1;
                                               c = 4;
                                               b = \&c;
z = **ppz;
                                               a = \&b;
*py+=2;
                                               printf("%d", Myfunction(c,b,a));
y = *py;
                                               return 0;
x+=3;
return x+y+z;
```

```
#include<stdio.h>
int main()
int arr[] = \{1,2,3,4,5\};
int *p = arr;
++*p;
p+=2;
printf("%d",*p);
return 0;
```

```
int main()
int a = 10;
int b = 7;
printf("%d",a & b && b + 1 ||0);
return 0;
```

```
procedure Test()
  // Initialize variables
  i = 0
  i = 0
  t = true
  r = false
    // Evaluate expressions
  r = (t \& 0 < (i += 1))
  r = (t \&\& 0 < (i += 2))
  r = (t \mid 0 < (j += 1))
  r = (t \mid | 0 < (j += 1))
  // Output values of i and j
  output i, " ", j
end procedure
// Call the Test procedure to execute the program
Test()
```

Q. Count Pairs with Sum arr = [1, 5, 7, -1, 5]count = 0for i = 0 to 4 for j = i+1 to 4if arr[i] + arr[j] == 6 count = count + 1end if end for end for print count

Q. What will be the output of the following code? function f(n) if n <= 1 return 1 end if return f(f(n-1)) end function

print f(5) // calling the function

```
arr = [-2, 1, -3, 4, -1, 2, 1, -5, 4]
max_sum = arr[0]
curr sum = arr[0]
for i = 1 to 8
  curr sum = max(arr[i], curr sum + arr[i])
  max_sum = max(max_sum, curr sum)
end for
print max sum
```

```
#include<stdio.h>
int main ()
  int m=0;
  if(m==0)
    m=((5,(m=3)),m=1);
    printf ("%d", m);
  else
  printf("Test");
  return 0;
```

```
Integer x, y
Set x = 15, y = 12
y = x - 1
do{
 Print x
 x = y + (x - 2)
while(x < 40)
end do while
```

Q. Which of the following if statements will compile without errors? Imagine the code written in java.

```
int i = 3;
int j = 3;
int k = 3;
a) if(i > j) {}
b) if(i > j > k) {}
c) if(i > j \&\& i > k) {}
d) if(i > j \&\& > k) {}
```

```
Integer fun(Integer a, Integer b)
if(b + a | | a - b| & (b > a) & (1)
a = a+b+b-2
return 3-a
Else
End if
return a-b+1
End function fun ()
```

```
Integer n, be, end
Set be = 5, end =7, sum =0
If(be>end)
       Print sum+1
Else
      for(n=end; n>=be; n=n-1)
             sum = sum + n
             n = n-1
      end for loop
print n
```

Q What will be the output of the following pseudocode for input a =2 and b =4?

```
int fun (int a, int b)
int n = 0
if(b<1)
return n
else
return fun (a+b+2, b-2)
```

Q What will be the value of t if a = 26, b = 168?

```
Read a, b
Function fun(a, b)
       t=0
       while(b!=0)
             t = t+a
             b = b-1
       end while
       return t;
end Function
```

```
Integer a, b, c
Set b = 10
for (each a from 1 to 4)
b = b + a
end for
c = b/5
print c
```

```
Integer p, q, r
Set p = 8, q = 6, r = 5
for (each r from 5 to 8)
              p = (6\&3) + r
              if(4<q)
p = 3 + r
q = q + q
    end if
end for
print p+q
```