THINK BIGGER

TECHNICAL PSEUDOCODE

INNATETALENT
TRANSFORMING FUTURE

What will be the output of the following pseudocode if p=29?

```
integer combine (integer p)
if (p <= 17)
combine (combine (p * 2))
end if
return p + 3
end function combine()
```

a) 32

b) 12

c) 13

d) 11

What will be the output of the following pseudocode if x=2 & y=5?

```
integer p(integer x, integer y)
if (y EQUALS 0)
return 1
else if (y mod 2 EQUALS 0)
return p(x, y/2) * (p(x, y/2)
else
return x * p(x, y/2) * p(x, y/2)
end if
end function p()
```

a) 32
b) 81
c) 36
d) 27

What will be the output of the following pseudocode when x=15 and y=20?

```
integer p(integer x, integer y)
if(x&y EQUALS 0)
return 1+x
else
return 1+y
end if
end function p ()
```

a) 11
b) 10
c) 21
d) 20

What will be the output of the following pseudocode?

```
Integer a, b, c
Set c = 12, b = 4
a = c / b
c = b >> a
Print c
```

a) 2

b) 0

c) 6

d) 1

What will be the output of the following pseudocode when a=10, b=13 & c=7?

```
Integer funn( integer a, integer b, integer c)
if(4 < c)
c= 1 + a
c = c + c + b
end if
return a + b+ c
end function funn ()
```

a) 58
b) 56
c) 29
d) 55

What will be the output of the following pseudocode?

```
Integer a, k, j, i
set a=10,k= a/4,j=k/1
for (each i from 1 to j)
print i+j
end for
```

a) 3 3

b) 3 4

c) 4 3

d) 4 4

What will be the output of the following pseudocode?

```
integer i,j
set i=0, j=9
do
i= i + j;
if ((j= j - 1) < ( i= i + 1))
JUMP OUT OF LOOP
end if
while (i < 5);
print i,j
```

a) 6,6
b) 5,5
c) 10,8
d) 4,4

What will be the output of the following pseudocode?

```
integer a, b
for(each a from 1 to 2)
b=17
print b + a- a * a
end for
print a + 1
```

a) 17 4 15
b) 17 17 16
c) 1 2 3
d) 17 15 4

Note: Assume that the outputs are separated by spaces, not new lines.

What will be the output of the following pseudocode?

```
Integer j, m
Set m=1
Integer a[4] = { 0,2,3,3}
if (a[1]<1)
        if ( a[2]<2)
                m=a[3]
        Else
                m=a[1]
        End if
        m=m^a[1]
End if
Print m
```

a) 5
b) 0
c) 1
d) 2

What will be the output of the following pseudocode?

```
integer fun(integer a)
integer b
set b= 10
return a- b
end function fun()
```

a) 50

b) 60

c) 40

d) None of the mentioned options

What will be the output of the following pseudocode?

```
integer number
set number = 1
do
print number
number = number + 1
print number + 1
while (number <=0)
end do while
print number
```

a) 2 1 1
b) 1 0 3
c) 1 1 2
d) 1 3 2

Note: Assume that the outputs are separated by spaces, not new lines.

What will be the output of the following pseudocode?

```
Integer pp,qq,rr
Set pp=1, qq=7, rr=3
for (each rr from 4 to 7)
        if ((pp-qq+rr)<(rr-pp))
                continue
        End if
        qq=pp^qq
        pp=(3+12)+rr
End for
Print pp+qq
```

a) 54
b) 8
c) 35
d) 41

What will be the output of the following pseudocode?

```
integer merge (integer x)
if (x < 2)
merge (merge (x + 1))
end if
return x
end function merge (2)
```

a) 2

b) 1

c) 3

d) 4

What will be the output of the following pseudocode?

```
Integer j, m
Set m=1
Integer a[5] = {7, 26, 13, 10, 1}
if (a[0]+a[1]>a[2])
        for (each j from 0 to 1)
                if (a[j+1]>1)
                        m=1
                Else
                        m=a[j+2]
                End if
        End for
End if
Print m
```

a) 1
b) 10
c) -4
d) 6

What will be the output of the following pseudocode when 10, and 20 are passed into the given function?

```
Integer funn(integer p, integer q)
integer r
set r = 1
p= p >> r
q= q>> r
return p + q
end function funn ( )
```

a) 15

b) 1

c) 21

d) -5

What will be the output of the following pseudocode if a=3 and b=4?

```
integer funn(integer a, integer b)
if(a + 2 - 1 - 1)
return a
end if
if( b + 1)
return a + 1 + b + 1
end if
return b
end function funn ()
```

a) 1
b) 2
c) 0
d) 3

What will be the output of the following pseudocode?

```
integer i, k
set k=0
for (each 1 from 3&4 to 15)
k= k+1
end for
print k
```

a) 7

b) 8

c) 6

d) 16

What will be the output of the following pseudocode for a = 1, b = 6, and c = 4?

```
Integer funn(Integer a, Integer b, Integer c)
for (each c from 4 to 6)
        a=(a+10)+a
        if ((b+a)>(a-b))
                continue
        Else
                jump out of the loop
        End if
        b=1+b
End for
return a+b
End function funn()
```

a) 84
b) 85
c) 96
d) 79

Note:- Continue: When a continue statement is encountered inside a loop, control jumps to the beginning of the loop for skipping the execution of statements inside the body of the loop for the current iteration.

What will be the output of the following pseudocode?

```
Integer a=33,j=9,b
for (each i from 1 to 3)
        b=j/i
        a=a+b
        if (a mod 2 EQUALs 0)
                Print a
        Else
                Print a-1
End for
```

a) 34 36 38
b) 42 46 48
c) 40 42 44
d) 32 36 40

Note:- MOD finds the remainder after the division of one number by another. For example, the expression "5 MOD 2" would evaluate to 1 because 5 divided by 2 leaves a quotient of 2 and remainder of 1.

What will be the output of the following pseudocode for a = 2, b = 7, and c = 6?

Note:-

&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bits of its second operand.

If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

```
Integer funn(Integer a, Integer b, Integer c)
        if ((b^a^c)<(a^c^b))
                if ((a^b^c)>(c^a))
                        c=a&b
                End if
                c=7&a
        Else
                if (a>b)
                        a=11+b
                End if
        End if
        return a+b+c
End function funn()
```

a) 15
b) 27
c) 14
d) 19

What will be the output of the following pseudocode?

Note:-

&& : Logical AND - The logical AND (&&) operator returns the Boolean value true (or 1) if both operands are true and return false (or 0) otherwise.

&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

```
Set a=2,b=2,c=15
if (a<b && (c+a)>(a-c))
        c=c+a
End if
Print a+b+c
```

a) 39

b) 19

c) 25

d) 5

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=4,b=2,c=15
a=a+b
b=10&b
b=(c&4)+a
Print a+b+c
```

a) 31
b) 28
c) 40
d) 45

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer m
Set m = 0
Integer p[5] = {1, 1, 0, 1, 7}
If (p[0] && P[4])
m = p[1]
End If
If (p[2] && p[3])
m = p[2]
End If
Print m
```

a) 1
b) -5
c) 4
d) 18

What will be the output of the following pseudocode?

```
Integer j, m
Set m=2
Integer a[4] = { 2,1,1,2}
m=m^a[2]
if (a[1]>1)
        m=m^1
Else
        m=m^2
End if
Print m
```

a) 8
b) -1
c) 1
d) 12

Note:- ^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer j, m, a[]
Set a[]={2,3,5,7,1}
m=a[0]
For (each j from 0 to 4)
        if (m<a[j])
                m=a[j]
        End if
End for
Print m
```

a) 2
b) 3
c) 5
d) 7

What will be the output of the following pseudocode for a = 2, b = 8, and c = 4?

```
Integer funn(Integer a, Integer b, Integer c)
        if ((b+c)<(c-b))
                a=10+c
                a=b+c
        Else
                a=(c^b)+b
                b=8+c
        End if
        return a+b+c
```

a) 45
b) 36
c) 27
d) 46

Note:- ^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer j, m
Set m=0
Integer a[4] = { 3,0,2,1}
for (each j from 0 to 3)
        if (a[j])
                m=a[j]
        End if
        if (j)
                m=a[j]+1
        End if
End for
Print m
```

[Note :- If(x) gets executed if value inside if(), i.e., x is not zero.]

a) 2
b) 5
c) 1
d) 8

What will be the output of the following pseudocode?

Note:-

&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

```
Integer a,b,c
Set a=0,b=4,c=8
if ((c+a+b)>(b-c))
        b=(c+c)+a
        c=(c+c)+a
End if
if ((c^a^b)<(b^c))
        a= 3 & a
End if
Print a+b+c
```

a) 32
b) 38
c) 33
d) 29

What is the output for the given pseudocode for input n=4?

```
function (input n)
{
        if (n<2)
                return n;
        else
           return function(n-1)+function(n-2);
}
```

a) 2

b) 1

c) 8

d) 3

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=0,b=11,c=10
for (each c from 4 to 6)
        a=(3+4)+b
        b=a&a
End for
b=(c+c)+b
Print a+b
```

a) 78
b) 69
c) 88
d) 84

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode for a = 2, and b = 7?

```
Integer funn(Integer a, Integer b)
        if (b>a && b>6)
                retrun funn(b,a)+funn(b,1)
        End if
        return 1
```

a) 16
b) 3
c) 1
d) -2

Note:- &&: Logical AND: The logical AND (&&) operator returns the Boolean value true (or 1) if both operands are true and returns false (or 0) otherwise.

&: bitwise AND: The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer a,b,c,d
Set a=12, b=3,c=0,d=0
while (2*a >=5)
        while(b<=5)
                b=b+2
                d=d+1
        end while
        a=a-5
        c=c+1
End while
Print c,d
```

a) 3, 2
b) 2, 2
c) Infinite loop
d) 1, 2

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=3,b=4,c=5
if ((b-c+a)<(a-b)
        a=(a+9)&a
        b=(c&c)+a
        if ((a+6)>(c-a))
                c=(c+c)+c
        End if
        c=b+a
        c=8+a
End if
Print a+b+c
```

a) 16
b) 8
c) 22
d) 12

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=2,b=7,c=4
a=(c&b)^a
if ((c+5)<(5+c)
        c=(c+c)+b
        b=(10+3)^b
        c=(b^a)^a
End if
Print a+b+c
```

a) 20
b) 16
c) 17
d) 24

What will be the output of the following pseudocode?

```
Integer a[5], b[5], c[5],k,l
Set a[5] = { 3,5,7,9,11}
Set b[5]={2,4,6,8,10}
for (each k from 0 to 4)
        c[k]=a[k]+b[k]
end for
for (each l from 0 to 4)
Print c[l]
end for
```

a) 1 1 1 1 1

b) 5 9 13 17 21

c) 6 8 14 18 22

d) None of the mentioned options

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=1,b=4,c=8
if (b>c OR (a+b) < (b-a))
        a=(7+10)+a
        b=(8+5)+a
End if
Print a+b+c
```

a) 8
b) 17
c) 26
d) 13

What will be the output of the following pseudocode?

```
Integer j,m
Set m=1
Integer a[4]={9,1,3,4}
if(a[0]>a[1])
        m=m+a[3]+a[2]-a[1]-a[0]
End if
Print m
```

a) 5
b) 9
c) -3
d) -2

What will be the output of the following pseudocode?

```
Integer a,b,c,z
Set a=10, b=20, z=1
if((a>>2) > (b>>1))
        z=z+1
end if
if((a>>1) < (b>>2))
        z=z+1
end if
Print z
```

a) None of the options
b) 1
c) 3
d) 15

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=1,b=8,c=4
if (1>a OR (c+a) < (a-c))
        c=7+b
        a=5^a
End if
Print a+b+c
```

a) 16
b) 22
c) 12
d) 13

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer array1[6], p,j,q
Set p=3
Set array1[6]={ 3,6,10,12,23,33}
for (each j from 0 to 5)
        if((array1[j] MOD P) EQUALS 0)
                p=array1[j]-p*3
        end if
q=p+array1[j]-3
end for
Print q
```

a) 34
b) 44
c) 54
d) 64

[**Note:-** MOD finds the remainder after the division of one number by another. For example, the expression "5 MOD 2" would evaluate to 1 because 5 divided by 2 leaves a quotient of 2 and remainder of 1.]

What will be the output of the following pseudocode for a = 0, b = 7, and c = 9?

```
Integer funn(Integer a, Integer b, Integer c)
        a=(b+11)+b
        if (9>c)
                b=(a+c)+a
                a=c&a
        End if
        return a+b+c
End function funn()
```

a) 41
b) 44
c) 47
d) 38

Note:-&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=5,b=6,c=4
b=(c+6)+c
if(a>b OR (c+b)<(8-c))
        b=9&b
Else
        a=(a+8)+a
End if
Print a+b+c
```

a) 10
b) 28
c) 36
d) 39

Note:-&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode if a is 10?

```
Integer fun(Integer a)
        if (a EQUALS 0)
                return 0
        otherwise if (a EQUALS 1)
                return 1
        otherwise
                return (a*(a-1)+fun(a-3))
End function fun()
```

a) 145

b) 121

c) None of the options

d) 140

What will be the output of the following pseudocode?

```
Integer a,b,c,d,e
Set a=4,b=12,c=41
while (a+b<c)
        d=d+a+b+c
        e=d/3
        a=a+5
        b=b+5
end while
Print e
```

a) 3

b) 67

c) 111

d) None of the options

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=0,b=3,c=5
for (each c from 4 to 7)
        if((b-a+c)>(c+b))
                continue
        End if
        b=a+c
        b=7+b
End for
Print a+b
```

a) 21
b) 9
c) 14
d) 24

Note: Continue: When a continue statement is encountered inside a loop, the control jumps to the beginning of the loop for skipping the execution of statements inside the body of the loop for the current iteration.

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=3,b=2,c=7
for (each c from 5 to 9)
        b=b+c
End for
a=(5+10)+a
c=(12+10)^c
for (each c from 5 to 6)
        a=(c+b)+b
        b=(a^9)+b
End for
Print a+b
```

a) 536
b) 540
c) 547
d) 541

Note: ^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

Note:-

&& : Logical AND - The logical AND (&&) operator returns the Boolean value True (or 1) if both operands are True and return False (or 0) otherwise.

||: Logical OR - The logical OR (||) returns the Boolean value True (or 1) if either or both operands is True and return False (or 0) otherwise.

```
Set a=1, b=0,c=6,d=7
for (each i from 0 to 3)
        if (a||b||(c && d))
                print a++
        end if
        if (a equals 2)
                print a++
        end if
        if (a equals 1)
                jump out of the loop
        end if
end for
print "journey"
```

a)
```
1
2
journey
```

b)
```
1
2
3
4
5
```

c)
```
0
1
2
3
4
journey
```

d)None of these

What will be the output of the following pseudocode?

```
Integer a[],k,t,m
Set a[]={25,20,30,18,17}
Set t=0
for (each k from 0 to 4)
        t=t+a[k]
        if(t mod 2 EQUALS 1)
                Print True
        else
                Print False
        end if
end for
m=t/5
Print m
```

a) true true true true false
22

b) false true true true false
20

c) true false true true false
15

d) true false true true false
20

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=4,b=5,c=9
b=(c+6)+c
if((b^c^a)<(a^b))
        b=(3+12)+c
End if
Print a+b+c
```

a) 31
b) 20
c) 24
d) 37

Note:&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode for a = 5, b = 2, and c = 8?

```
Integer funn(Integer a, Integer b, Integer c)
        for (each c from 5 to 7)
                a=(b+b)^b
                a=9+b
        End for
        for (each c from 4 to 6)
                b=(a+b)^a
        End for
return a+b
```

a) 64
b) 54
c) 67
d) 57

Note:- ^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

What will be the output of the following pseudocode for a=3, b=1,c=7?

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

```
Integer funn(Integer a, Integer b, Integer c)
        c=(3^1)+a
        b=3&c
        b=(a+7)^b
        if ((a^c^3)<(a^b^1)
                b=a+c
                c=(1+3)+a
        End if
        return a+b+c
```

a) 9
b) 18
c) 11
d) 7

What will be the output of the following pseudocode?

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.^ is the bitwise exclusive OR operator that compares each bits of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise , the corresponding result bit is set to 0.

```
Integer a,b,c
Set a=2,b=4,c=6
b=(c^b)&b
b=(b+1)+c
b=(c+11)+b
c=(8+11)&a
c=(c^12)+a
Print a+b+c
```

a) 46
b) 50
c) 42
d) 54

What will be the output of the following pseudocode?

```
Integer a,b,c
set a= 0, b= 5, c=12
if (3<c)
a= 10 & c
end if
if ((c - a + b) > (b - c))
a= ( a + 6 ) + c
c = ( a = a ) & b
end if
print a + b + c
```

a) 32
b) 40
c) 35
d) 50

What will be the output of the following pseudocode?

```
Integer a,b,count,count1
Set a=1, b=1
while(a<=5)
b=1
while(b<=5)
b=b+1
count1 = count1 + 1
end while
a= a + 1
count = count +1
End while
Print count, count1
```

a) count=5 count1=25

b) count=45 count1=25

c) count=50 count1=5

d) count=50 count1=25

What will be the output of the following pseudocode?

```
Integer l,k,m, a[5]
Set l=5
Set a[5] = { 3,4,6,16,7}
for (each k from 0 to 4)
        if(l<a[k])
                l=a[k]
        end if
m=l+a[k]
end for
print m
```

a) 17
b) 14
c) 23
d) None of the options

What will be the output of the following pseudocode for x=3 and y=4?

```
integer fun(int x, int y)
if(x>0)
fun(x-1,y+1);
End if
Print y
End function fun()
```

a) 8 5 4 2

b) 7 6 5 4

c) 2 0 1 4

d) 5 0 3 4

What will be the output of the following pseudocode?

```
Integer a, b, c
set a= 7, b= 2, c= 8
b = (b&b) + b
a= (5 & 11) + a
c= c
print a + b + c
```

a) 30

b) 20

c) 15

d) 22

What will be the output of the following pseudocode?

```
integer a, b, c
set a= -3, b = -2
if( b - 2 < b)
for (each c from 1 - 1 to 2 - 1)
a= a + 1
end for
end if
print a +b
```

a) -4
b) 3
c) 4
d) -3

What will be the output of the following pseudocode if n=40 and LIMIT=100 ?

```
Integer fun2(Integer n);
if(n < +0)
return 1;
if(n > LIMIT)
return 2;
Print n
fun2(2*n);
Print n
End function fun2()
```

a) 10 20 20 10
b) 20 40 40 20
c) 40 80 80 40
d) 80 120 120 80

Which one of the following gets generated by the given pseudocode for input n=5?

```
function(input n)
{
  if (n < 2)
   return n;
 else return function (n-1) + function(n-2);
}
```

a) 5

b) 4

c) 3

d) 1

What will be the output of the following pseudocode for a = 4, b = 1?

```
Integer funn(Integer a, Integer b)
        if (a>b && b=a>0)
                return b+funn(a-b+a+a+a,b-b-b-b+a)
        End if
        if (1>b&a)
                return a-b
        End if
return a
```

a) 0
b) 14
c) None of the option
d) 5

Note:- &&: Logical AND - The logical AND (&&) operator returns the Boolean value true (or 1) if both operands are true and return false (or 0) otherwise.

&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=0
for (each b from 0 to 10)
        a=a+b
        if (a MOD 4 EQUALS 0)
                Print "True"
                Jump out of the loop
        end if
end for
Print b
```

a) 0

b) 0
1

c) True
0

d) None of the options

What will be the output of the following pseudocode?

```
Input f = 6,g = 9 and set sum = 0
Integer n
if (g > f)
for(n=f; n<g; n=n+1)
sum=sum+n
End of loop
else
print Error messages
print sum
```

a) 21
b) 15
c) 9
d) 2

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=7,b=3,c=10
a=(c+a)+b
if (c&b&a)<(b&a&c)
        a=(1+2)+c
End if
Print a+b+c
```

a) 44
b) 28
c) 37
d) 33

What will be the output of the following pseudocode for a = 2, b = 8?

```
Integer funn(Integer a, Integer b)
        if (a+10>b || a>20)
                retrun funn(a+10,a-10)
        End if
        return a+b+10
```

a) 11

b) 14

c) 24

d) Infinite recursive function

What will be the output of the following pseudocode?

```
Integer p,q,r
Set p=1, q=3, r=8
p=3^1
if((r^3)<8 && (4^6)<r)
   q=r^q
Else
   p=(p+q)+r
End if
Print p+q+r
```

a) 30
b) 25
c) 27
d) 24

What will be the output of the following pseudocode?

```
Integer p, q, r
Set p= 6, q= 3, r= 0
while(1)
r= p - q
p= p + r
if(p> 23)
 Jump out of the loop
else
q= p - q
End if
print q
End while
```

a) 3 6 12
b) 7 7 14
c) 6 6 12
d) 6 6 12 18

[**Note:** While(1): it is an infinite loop which will run till a break of similar statement is issued Explicitly]

What will be the output of the following pseudocode?

```
Integer a,b,c,d,e
Set a=4,b=12,c=41,d=0
while (a+b<c)
        d=d+a+b+c
        e=d/3
        a=a+5
        b=b+5
end while
Print e
```

a) 3
b) 67
c) 111
d) None of the options

What will be the output of the following pseudocode?

```
integer j,m
set m=0
integer a[4]={10,11,3,2}
for (each j from m to m+3)
if (j> 0)
a[j]= a[j-1] + 2
end if
end for
m= a[0] + a[2] + a[1]
print m
```

a) 52
b) 29
c) 41
d) 36

What will be the output of the following pseudocode for a=9,b=2?

```
Integer funn(Integer a, Integer b)
        if (b<a)
                return a+funn(b+1,a+1)+funn(b+2,a+2)
        End if
        return b
```

a) 37

b) 27

c) 41

d) 30

What will be the output of the following pseudocode for c=1?

```
Integer fun(Integer c)
        Print c
        if(c<3)
                c=c+2
                fun(fun(c)
        end if
return c
end function fun
```

a) 1
   3
b) 1
   3
   3
c) 3
d) None of the options

What will be the output of the following pseudocode?

```
set p=1, q=1
Integer fun ( integer p, integer q)
if( q ^ 2 > p ^ 3)
p= q ^ 2
else
q = p & 2
end if
return p ^ q
end function fun ()
```

a) 3
b) 8
c) 2
d) 1

What will be the output of the following pseudocode?

```
integer k, p
set k= 56
p = k + 8 - 78 / 8 * 4/7 - 5/ 2
if (p)
print "hello "
else
print " bye"
end if
```

[**Note:** If (X) gets executed if the value inside if( ), ie, x is not zero].

a) bye
b) hello
c) hello bye
d) none of the options

What will be the output of the following pseudocode?

```
Integer p,q,r
Set p=5, q=3, r=8
for(each r from 4 to 7)
  q=9+r
  if((4+r-p)>(p+q))
    p=(q+r)+r
  Else
    q=(r^q)^p
  End if
End for
Print p+q
```

a) 27
b) 22
c) 23
d) 29

Note: ^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bit of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode?

Note:

Continue; When a continue statement is encountered inside a loop, control jumps to the beginning of the loop for the next iteration, skipping the execution of statements inside the body of the loop for the current iteration.

Bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

```
Integer pp, qq, rr
Set pp=1, qq=4, rr=8
for (each rr from 3 to 6)
    qq= rr&pp
    if((rr+qq)>(pp-rr))
      continue
    Else
      rr=(9+4)+pp
      pp= qq+rr
    End if
End for
Print pp+qq
```

a) 4
b) 1
c) 15
d) -1

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=8,b=6,c=8
c=b+b
a=(a+c)&c
a=(2&5)+a
b=10+b
Print a+b+c
```

a) 32
b) 37
c) 25
d) 42

Note:- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

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

```
fun(char a )
   if (a[0] EQUALS NULL)
     Return
   end if
   fun(a + 1)
   fun(a + 1)
  Print (a[0])
end function fun
```

Note: Here, NULL means the end of the string.

a) rrqrrqp
b) ppqqrr
c) rqppqr
d) pqrrqrr

What will be the output of the following pseudocode?

```
Integer j, m
set m= 1
integer a[4] = { 1, 1, 1, 2}
a[2]= a[1] - a[2] + a[3]
a[3] = a[2]
m= a[3]
print m
```

a) -6
b) 16
c) 2
d) 3

What will be the output of the following pseudocode for p = 4, q = 4?

```
Integer funn ( integer p, integer q)
if (p - q < 1)
return funn ( 5,1)
end if
return p & q
end function funn ( )
```

a) 4
b) 1
c) -3
d) 7

[**Note-** & bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit

of the second operand if both bits are 1 the corresponding result bit is set to 1. otherwise, the corresponding result bit is set to 0]

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=2,b=4,c=6
b=(c^b)&b
b=(b+1)+c
b=(c+11)+b
c=(8+11)&a
c=(c^12)+a
Print a+b+c
```

a) 46
b) 50
c) 42
d) 54

What will be the output of the following pseudocode?

```
Integer n,j,k,c,t,b,array[5]
Set n=7, c=1
Set array[5]={1,6,7,11,13}
b=array[0]
for (each k from 1 to n-3)
        b=b^array[k]
end for
for (each k from 2 to n-1)
        c=c^k
Print c
```

a) 7
b) 4
c) 5
d) None of the options

Note:- ^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode when p=-5,q=4?

```
Integer funn(Integer p, Integer q)
  if(p>1)
   return 1
  End if
  if(q>0 || p>0)
    return funn(0, q-1)+funn(p+2,0)
 Else
    return p+1
 End if
 return q
```

a) 8
b) 5
c) 1
d) 2

Note:-||: Logical operator OR - The Logical OR operator (||)returns the Boolean value TRUE(or 1)if either or both operands is TRUE and returns FALSE (or 0) otherwise.

What will be the output of the following pseudocode?

```
integer array1[6],p,j,q
set p=3
set array1[6]={3, 6, 10, 12, 23, 33}
for (each j from 0 to 5)
if ((array1 [j] MOD p) EQUALS 0)
p = array1[j] - (p * 3)
end if
q= p+ array1[j] - 3
end for
print q
```

a) 64
b) 44
c) 34
d) 54

[**Note:** MOD finds the remainder after the division of one number by another. For example, the expression "5 MOD" would evaluate to 1 because 5 leaves a quotient of 2 and a remainder of 1]

What will be the output of the following pseudocode for a= 22?

```
integer compact(integer a)
if( a <= 45)
compact( compact (compact (a * 5 + 1)))
end if
return a*2
end function compact ()
```

a) 22

b) 45

c) 56

d) 44

What will be the output of the following pseudocode when a is 10?

```
Integer fun(Integer a)
        if (a EQUALS 0)
                return 0
        otherwise if (a EQUALS 1)
                return 1
        otherwise
                return (a*(a-1)+fun(a-3))
End function fun()
```

a) 145
b) 121
c) 140
d) None of the options

What will be the output of the following pseudocode?

```
Integer a[5], b[5], c[5],k,l
Set a[5] = { 3,5,7,9,11}
Set b[5]={2,4,6,8,10}
for (each k from 0 to 4)
        c[k]=a[k]+b[k]
end for
for (each l from 0 to 4)
Print c[l]
end for
```

a) 1 1 1 1 1
b) 5 9 13 17 21
c) 6 8 14 18 22
d) None of the options

What will be the output of the following pseudocode?

```
Integer a, b, c
Set a=5, b=7, c=7
for(each c from 3 to 5)
  if((a+b+c)>(c-a))
   b=(a&c)+c
   a=c+c
 End if
 a=(b^c)+c
End for
Print a+b
```

a) 24
b) 26
c) 28
d) 30

What will be the output of the following pseudocode?

```
Integer p , q
Set q = 280,p=0
for (each i from 1 to 4)
    q = q / 10
    p = p + q + 2
end for
Print p
```

a) 32
b) 288
c) 12
d) 38

What will be the output of the following pseudocode?

```
Integer p,q,r
Set p=3, q=7, r=8
p=9+r
if((p+r)<(r-q))
   q=(q+r)+p
End if
Print p+q+r
```

a) 26
b) 32
c) 37
d) 46

Which sorting algorithm is implemented in the below pseudocode?

```
for j = 2 to n
  key ← A [j]
     j ← i – 1
    while i > 0 and A[i] > key
      A[i+1] ← A[i]
       i ← i – 1
    A[j+1] ← key
```

a) Insertion sort
b) Shell sort
c) Selection sort
d) Bubble sort

What will be the output of the following pseudocode?

```
Integer p[10] = {12, 16, 24, 2, 18, 20}
Integer a, b, c, d, e
Set b = 0, e = 2
for (c from 1 to 11) and Increment c by 2 for each iteration
    b = b + p[c+1]
end for
d = (b+e) MOD 2
Print d
```

a) 33
b) 14
c) 0
d) 1

Note: MOD finds the remainder after the division of one number by another. For example, the expression because 5 divided by 2 leaves a quotient of 2 and a remainder of 1.

What will be the output of the following pseudocode?

Note-&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bit of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

```
Integer pp, qq, rr
Set pp = 7, qq = 7, rr
for (each rr from 3 to 5)
  pp = qq + pp
  if ((3-rr-qq) > (qq-pp))
    pp= 3 + rr
    pp= (qq^pp)& pp
   Enf if
Enf for
Print pp + qq
```

a) 24
b) 16
c) 12
d) 14

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=5,b=6,c=4
b=(c+6)+c
if(a>b OR (c+b)<(8-c))
        b=9&b
Else
        a=(a+8)+a
End if
Print a+b+c
```

a) 10
b) 28
c) 36
d) 35

Note:&: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode for a=1, b=3, c=5?

```
Integer funn(Integer a, Integer b, Integer c)
for(each c from 5 to 3)
    b = 11+c
    if((b+5)>(c-b))
        a=(5+5)&c
    End if
End for
return a + b
```

a) 23
b) 29
c) 27
d) 16

Note: ^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bit of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

What will be the output of the following pseudocode for x = 45?

```
Integer fun (Integer x)
    if ((x MOD 6) MOD 2 > 0)
     return x / 9
    else
      return fun (x / 9)
    end if
end function fun ()
```

a) 1
b) 0
c) 5
d) Results in an infinite loop

Note: mod finds the reminder after the division of one number by another. For example, the expression "5 mod 2" would evaluate to 1 because 5 divided by 2 leaves a quotient of 2 and reminder of 1.

What will be the output of the following pseudocode?

```
Integer array1[6], p,j,q
Set p=3
Set array1[6]={ 3,6,10,12,23,33}
for (each j from 0 to 5)
        if((array1[j] MOD p) EQUALS 0)
                p=array1[j]-p*3
        end if
q=p+array1[j]-3
end for
Print q
```

a) 54
b) 64
c) 44
d) 34

What will be the output of the following pseudocode?

Note: Continue; When a continue statement is encountered inside a loop, control jumps to the beginning of the loop for the next iteration, skipping the execution of statements inside the body of the loop for the current iteration.

^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bit of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

```
Integer a, b, c
Set a=5, b=6, c=10
for(each c from 2 to 0)
   if (a<c)
     continue
   End if
   b= (c+c)^a
   b= 9 +a
End for
Print a+b
```

a) 20
b) 27
c) 30
d) 19

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=7,b=7,c=9
if ((a^b^c)>(b^a))
        c=b&b
End if
Print a+b+c
```

a) 23

b) 21

c) 24

d) 27

What will be the output of the following pseudocode for a=3, b=1, c=7?

```
Integer funn(Integer a, Integer b, Integer c)
        c=(3^1)+a
        b=3&c
        b=(a+7)^b
        if ((a^c^3)<(a^b^1)
                b=a+c
                c=(1+3)+a
        End if
        return a+b+c
```

a) 16

b) 18

c) 15

d) 17

What will be the output of the following pseudocode?

```
Integer a,b,c
Set a=2,b=7,c=4
a=(c&b)^a
if ((c+5)<(5+c)
        c=(c+c)+b
        b=(10+3)^b
        c=(b^a)^a
End if
Print a+b+c
```

a) 20
b) 16
c) 17
d) 24

DIFFERENTIATE

"YOURSELF"

FROM OTHERS !!

YouTube

SUBSCRIBE

INNATETALENT
TRANSFORMING FUTURE

INNATETALENT
TRANSFORMING FUTURE