C. ○5

D. ○13

Reset

Q 24. What will be the output of the following pseudocode?

```
1. String str1="mars",str2="lion"
2. Print isPalin(str2+str1)+countVowel(str2+str1)
```

Note: countVowel(string) returns the number of vowels in the string. Ex- countVowel("okay") returns 2.
isPalin(string) returns 1 if the string is a palindrome, otherwise returns 0. Ex- isPalin("yyy") returns 1.

Ops: A. ○5

B. ◉3

C. ○2

D. ○7

Reset

Q 25. Solve the given postfix expression.
2 3 1 - 5 * +

Ops: A. ○8

B. ○10

C. ◉12

D. ○6

Reset

Previous Section

Next Section

C. 48

D. 49

Reset

Q 23. What will be the output of the following pseudocode for a=2, b=17

```
1. Integer funn(Integer a, Integer b)
2.     if(b&a>0)
3.         return funn(b-1,a+2)
4.     End if
5.     return b+a
```

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.

Ops: A. 4

B. -1

C. 5

D. 13

Reset

Q 24. What will be the output of the following pseudocode?

```
1. String str1="mars",str2="lion"
2. Print isPalin(str2+str1)+countVowel(str2+str1)
```

Note: countVowel(string) returns the number of vowels in the string. Ex- countVowel("okay") returns 2.
isPalin(string) returns 1 if the string is a palindrome, otherwise returns 0. Ex- isPalin("

Ops: A. 5

22. What will be the output of the following pseudo code?

```
1.  Integer a,b,c
2.  Set a=1, b=5, c=8
3.  if((c+b+a)<(4-a-c))
4.      b=c+a
5.  Else
6.      b=b+c
7.      b=(c+12)+a
8.  End if
9.  c=5+b
10. Print a+b+c
```

Options:
A. 43
B. 53
C. 48
D. 49

Reset

23. What will be the output of the following pseudocode for a=2, b=1?

```
1.  Integer funn(Integer a, Integer b)
2.      if(b&a>0)
3.          return funn(b-1,a+2)
4.      End if
5.      return b+a
```

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.

Options:
A. 4

Q 21. What will be the output of the following pseudo code?

```
1.  Integer a,b,c
2.  Set a=1, b=5, c=8
3.  if((b+8)<c)
4.      c=(c+b)+b
5.  Else
6.      c=(c+b)+a
7.  End if
8.  c=(6+7)+b
9.  if((b+c)<(a-b))
10.     b=(a+c)+a
11. End if
12. Print a+b+c
```

Opts: A. 35

B. 4

C. 24

D. 32

Reset

Q 22. What will be the output of the following pseudo code?

```
1.  Integer a,b,c
2.  Set a=1, b=5, c=8
3.  if((c+b+a)<(4-a-c))
4.      b=c+a
5.  Else
6.      b=b+c
7.      b=(c+12)+a
8.  End if
9.  c=5+b
```

Reset

Q 18. If we draw a binary search tree by inserting the given numbers from left to right, then what would be the height of the BST?

103, 83, 93, 73, 53

Ops: A. ○ 6

B. ○ 5

C. ○ 4

D. ◉ 3

Reset

Q 19. In Linked List memory is allocated during -

I. Compile time

II. Run time

Ops: A. ◉ Only II

B. ○ Only II

C. ○ Both I and II

D. ○ Neither I Nor II

Reset

Q 20. Find out the number of vertices in a simple graph, if there are 8 edges, 2 vertices of degree 3, and all others of degree 2.

Ops: A. ○ 6

B. ○ 8

C. ◉ 7

D. ○ 9

Reset

Q 17. What will be the output of the following pseudocode?

```
1. Integer p,q,r
2. Set p=9, q=6, r=4
3. r=10^p
4. p=r+r
5. p=p+q
6. p=12&r
7. Print p+q+r
```

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.

Ops: A. ○ 23

B. ○ 11

C. ○ 3

D. ● 9

Reset

Q 18. If we draw a binary search tree by inserting the given numbers from left to right, then what would be the height of the BST?

103, 83, 93, 73, 53

Ops: A. ○ 6

B. ○ 5

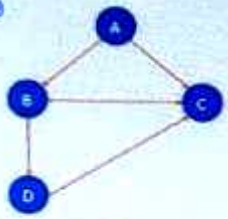
C. ○ 4

Q 16.

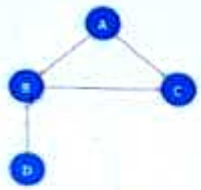
	A	B	C	D
A	0	1	1	0
B	0	0	1	1
C	0	0	0	0
D	0	0	1	0

Which of the following is the correct graph represented by the given Adjacency Matrix?

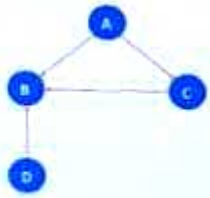
Ops: A.



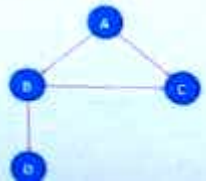
B.



C.



D.



C. ○7

D. ○0

Reset

Q 15. What will be the output of the following pseudocode?

```
1. Integer  i, m
2. Set m=1
3. Integer a[5] = { 1, 2, 2, 5, 1 }
4. for(each i from 1 to 4 )
5.     a=1
6. End for
7. m=a[0]+a[4]+a[1]
8. Print m
```

Ops: A. ○13

B. ◉3

C. ○0

D. ○7

Reset

Q 16.

	A	B	C	D
A	0	1	1	0
B	0	0	1	1
C	0	0	0	0
D	0	0	1	0

Which of the following is the correct graph represented by the given Adjacency Matrix?

Ops: A. ◉

Ops: A. 5

B. 4

C. 6

D. 3

Reset

Q 14. What will be the output of the following pseudo code?

```
1.
2.  Integer j
3.  Integer arr[2][2]= {{0, 1}, {1, 2}}
4.  if((arr[0][0]+arr[0][1])<(arr[0][1]-arr[0][1]))
5.      arr[1][0]=(arr[0][1]&arr[0][1])^arr[1][1]
6.      arr[0][1]=(arr[0][1]&4)+arr[0][1]
7.  End if
8.  Print arr[1][1]+arr[0][1]
```

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.

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.

Ops: A. 3

B. 13

C. 7

D. 0

Reset

Q 15. What will be the output of the fol

Q 12.

15	6	18	3	7	17	20	2	4	13
0	1	2	3	4	5	6	7	8	9

From the given linear or array representation of the binary tree find the left child of 18?

Ops: A. ○ 20

B. ○ 7

C. ○ 2

D. ● 17

Reset

Q 13. Find out the number of swappings required for sorting the given numbers in ascending order if you are using Bubble sort for sorting.

20, 28, 15, 22, 25

Ops: A. ○ 5

B. ● 4

C. ○ 6

D. ○ 3

Reset

Q 14. What will be the output of the following pseudo code?

```
1.
2.  Integer j
3.  Integer arr[2][2]= {{0, 1}, {1, 2}}
4.  if((arr[0][0]+arr[0][1])<(arr[0][1]-arr[0][1]))
5.      arr[1][0]=(arr[0][1]&arr[0][1])^arr[1][1]
6.      arr[0][1]=(arr[0][1]&4)+arr[0][1]
7.  End if
8.  Print arr[1][1]+arr[0][1]
```

Q 11. What will be the output of the following pseudo code?

```
1.  Integer p,q,r
2.  Set p=1, q=2, r=10
3.  if((q&p)<(8-q))
4.      p=(r+17)^q
5.      if((r+3)<(3-r))
6.          p=q^q
7.      End if
8.  Else
9.      if((q^p)<r)
10.         q=5+r
11.         r=(r^q)+q
12.     End if
13.     r=(r+4)+p
14. End if
15. Print p+q+r
```

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.

Ops: A. 30

B. 32

C. 39

D. 44

Reset

Q 10. What will be the output of the following pseudo code?

```
1.  Integer pp,qq,rr
2.  Set pp=1, qq=2, rr=10
3.  if((qq&rr)<pp)
4.      pp=(qq&4)+pp
5.  Else
6.      rr=(rr+pp)&rr
7.      if((rr+qq+pp)<(9-rr))
8.          rr=qq+qq
9.      Else
10.         rr=(12^4)+rr
11.     End if
12. End if
13. Print pp+qq+rr
```

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.

Ops:

A. ○ 22

B. ○ 29

C. ○ 19

D. ● 21

Reset

Q 09. What will be the output of the following pseudo code?

```
1.  Integer a,b,c
2.  Set a=1, b=2, c=10
3.  if((c+a+b)<(a+b+c))
4.      c=3+a
5.      if((c+a+b)>(b+c))
6.          c=(a+a)+a
7.      Else
8.          a=c+a
9.      End if
10.     c=(3+3)+a
11. Else
12.     c=(a+b)+a
13.     if((a-b)<(b-a))
14.         c=7+c
15.     Else
16.         c=b+a
17.     End if
18. End if
19. Print a+b+c
```

Ops: A. 15

B. 14

C. 25

D. 5

Reset

Q 10. What will be the output of the following pseudo code?

```
1.  Integer
```

D. -1

Reset

Q 08. What will be the output of the following pseudo code for a=1, b=0?

```
1.
2.  Integer funn(Integer a, Integer b)
3.      if((7&b)>(b-2) && (a-b)>(b&a))
4.          b=b+3
5.          b=a+3
6.          a=(b+3)+b
7.          return funn(a,a)+a
8.      End if
9.      a=a+1
10.     return b-a
```

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.

Ops: A. 12

B. -8

C. 10

D. 23

Reset

Q 09. What will be the

```
1.
2.  Integer funn(Integer a, Integer b)
3.      if((b^a)<(3-b) && (b&a)<(a-b))
4.          a=a+3
5.          a=b+3
6.          b=a+2
7.          return funn(a,b)-a
8.      End if
9.      return a-1
```

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.

^ 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.

A. 5

B. -16

C. 14

D. 1

Reset

8. What will be the output of the following pseudo code for a=1, b=0?

```
1.
2.  Integer funn(Integer a, Integer b)
```

Reset

Q 06. What will be the output of the following pseudo code for a=1, b=0?

```
1.
2. Integer funn(Integer a, Integer b)
3.     if((3^b)>(b+a) && (2&b)>(b-2))
4.         a=2+1+b
5.         a=a+2
6.         return funn(b+2,b+1)
7.     End if
8.     b=b+1
9.     return b-a+1
```

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.

^ 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.

Ops: A. ● 1

B. ○ -4

C. ○ 5

D. ○ 20

Reset

Q 07. What will be the output of the following pseudo code for a=2, b=0?

Q 04. What will be the output of the following pseudo code?

```
1.  Integer p,q,r
2.  Set p=3, q=6, r=6
3.  r=(5+1)+r
4.  if(7<p && (q+r)<(r-q))
5.      q=(p+3)+q
6.      p=(q+q)+r
7.  Else
8.      q=q+r
9.      p=q&r
10. End if
11. p=(6+6)^r
12. Print p+q+r
```

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.

^ 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.

Ops:
A. (●) 30
B. ( ) 26
C. ( ) 41
D. ( ) 35

Reset

Reset

Q 05. What will be the output of the following pseudo code?

```
1. Integer pp,qq,rr
2. Set pp=5, qq=4, rr=9
3. if(2>pp && 2>pp)
4.     pp=5+rr
5. Else
6.     qq=8&pp
7.     rr=(1+4)+rr
8. End if
9. Print pp+qq+rr
```

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.

Ops: A. ○ 16

B. ○ 32

C. ○ 22

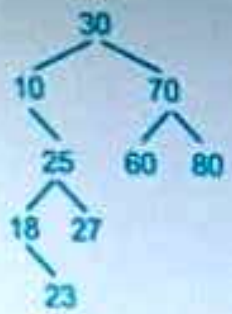
D. ◉ 19

Reset

Q 06. What will be the output of the following pseudo code for a=1, b=0?

```
1.
```

03.



Which of the following is the correct Postorder Traversal of the given tree?

Ops: A. 23-18-27-25-10-60-80-70-30

B. 30-10-25-18-23-27-70-60-80

C. 10-18-23-25-27-30-60-70-80

D. 30-10-70-25-60-80-18-27-23

Reset

Q 04. What will be the output of the following pseudo code?

```
1.  Integer p,q,r
2.  Set p=3, q=6, r=6
3.  r=(5+1)+r
4.  if(7<p && (q+r)<(r-q))
5.      q=(p+3)+q
6.      p=(q+q)+r
7.  Else
8.      q=q+r
9.      p=q&r
10. End if
11. p=(5+6)^r
12. Print p+q+r
```

01. Pseudo Code

Q 01. If we draw a binary search tree by inserting the given numbers from left to right, then what would be the height of the BST?
48, 36, 12, 9, 11

Ops: A. ○6
B. ○2
C. ○3
D. ●4

Reset

Q 02. Solve the given postfix expression.
3 2 + 5 / 4 +

Ops: A. ○2
B. ○3
C. ●5
D. ○8

Reset

Q 03.

Which of the following is the correct Postorder Traversal of the given tree?

Ops: A. ●