## **1. Infosys Pseudocode Questions:**

What will be the output of the following pseudocode?

**Question 1)** for i=0 to 4 step 1 do  
 If i==i++ + –i then do  
 display i  
 end-if  
 end-for  
**Answer:** 0

**Question 2)** Set Character c = ‘7’  
 switch(c)  
 case ‘1’: display “One”  
 case ‘7’: display “Seven”  
 case ‘2’: display “Two”  
 default: display “Hello”  
 break  
 end-switch   
**Answer:** SevenTwoHello

**Question 3)** Integer a, p  
 Set a = 5  
 a = a + 1  
 a = a \* 2  
 a = a / 2  
 p = a / 5 + 6  
 print p   
**Answer:** 7

**Question 4)** Integer a, b, c  
 Set b = 40, a = 20, c = 20  
 a = a + c  
 c = c + a  
 a = a + c  
 c = c + a  
 Print a + b + c   
**Answer:** 300

**Question 5)** Integer a, b, c  
 Set a = 4, b = 3, c = 1  
 if (a >> (c – 1) && b << (c + 1))  
 a = a + c  
 Else  
 b = a <<< C  
 End if  
 Print a – b + c ﻿﻿   
**Answer:** 3 ﻿﻿ ﻿﻿ ﻿﻿

## **2. Accenture Pseudocode Questions:**

What will be the output of the following pseudocode?

**Questions 1)** What will be the output of the following pseudocode for a = 5, b = 1?

Integer funn(Integer a, Integer b)  
 if(b + a || a – b) && (b > a) && 1)  
 a = a+b+b-2  
 return 3-a  
 Else  
 return a-b+1  
 End if  
 return a + b  
 End function fun()  
**Answer:** 5

**Questions 2)** What will be the output of the following pseudocode for a = 5, b = 1?

Integer funn(Integer a, Integer b)  
 if((b mod a && a mod b) || (a ^ b > a))  
 a=a ^ b  
 Else  
 return a-b  
 End if  
 return a + b  
 End function funn()  
**Answer:** 5

**Questions 3)** What will be the output of the following pseudocode?

Integer a, b, c  
 Set a = 4, b = 4, c = 4  
 if (a & (b ^ b) & c)  
 a = a >> 1  
 End if  
 Print a + b + c  
**Answer:** 12

**Questions 4)** What will be the output of the following pseudocode for a = 10, b = 11?

Integer funn(Integer a, Integer b)  
 if(0)  
 return a – b – funn(-7, -1)  
 End if  
 a = a + a + a + a  
 return a  
 End function funn()  
**Answer:** 40

**Questions 5)** What will be the output of the following pseudocode for a = 5, b = 1?

Integer funn(Integer a, Integer b)  
 if(b + a || a – b) && (b > a) && 1)  
 a = a + b + b – 2  
 return 3 – a  
 Else  
 return a – b + 1  
 End if  
 return a + b  
 End function fun()  
**Answer:** 5

## **3. Capgemini Pseudocode Questions**

What will be the output of the following pseudocode?

**Question 1)** What will be the output of the following pseudocode for a=8, b=1?

Integer funn(Integer a, Integer b)  
If(a > b && a > 0)  
 Return a + b + funn (b-1, a-1)  
End if  
Return a + b  
**Answer:** 16

**Question 2)** What will be the output of the following pseudocode for p=7, q=2?

Integer funn(Integer p, Integer q)  
 if(p + q < 10)  
 Return 1 + funn(p + 1, q + 1)  
 Else  
 Return 2  
 End if  
**Answer:** 3

**Question 3)** What will be the output of the following pseudocode for a=2, b=7, c=7?

Integer funn(Integer a, Integer b, Integer c)  
 if ((b + a) < (a – b))  
 a = a + c  
 b = (10 + 10) + c  
 End if  
 Return a + b + c  
**Answer:** 16

**Question 4)** What will be the output of the following pseudocode?

String str1 = “err”, str2 = “krr”  
Print (count consonant(upper(reverse(str2) + reverse(str1))))  
**Answer:** 5

**Question 5)** What will be the output of the following pseudo code?

Integer a, b, c  
Set a = 2, b = 11, c = 5  
if ((4 + 5) < (6 + b))  
 b = c & a  
End if  
Print a + b + c  
**Answer:** 7

**IF Else Pseudo Code:**

**1. Write a C program to find maximum between two numbers.**

BEGIN

// Input: Two numbers, A and B

INPUT A

INPUT B

// Compare the two numbers

IF A > B THEN

// A is greater than B

MAXIMUM = A

ELSE

// B is greater than or equal to A

MAXIMUM = B

ENDIF

// Output the result

OUTPUT MAXIMUM

END

**2.Write a pseudo code to find maximum between three numbers.**

BEGIN

// Input: Three numbers, num1, num2, and num3

INPUT num1

INPUT num2

INPUT num3

// Initialize max with the value of num1

max = num1

// Compare max with num2

IF num2 > max THEN

max = num2

END IF

// Compare max with num3

IF num3 > max THEN

max = num3

END IF

// Output: The maximum number

OUTPUT max

END

**3.Write a pseudo code to check whether a number is negative, positive or zero.**

BEGIN

// Input: A number

INPUT number

// Check if the number is positive

IF number > 0 THEN

OUTPUT "The number is positive"

// Check if the number is zero

ELSE IF number == 0 THEN

OUTPUT "The number is zero"

// If the number is not positive and not zero, it must be negative

ELSE

OUTPUT "The number is negative"

END IF

END

**4.Write a Pseudo code to check whether a number is divisible by 5 and 11 or not.**

BEGIN

// Input: A number

INPUT number

// Check if the number is divisible by both 5 and 11

IF (number % 5 == 0) AND (number % 11 == 0) THEN

OUTPUT "The number is divisible by both 5 and 11."

ELSE

OUTPUT "The number is not divisible by both 5 and 11."

END IF

END

**5.Write a Pseudo code to check whether a number is even or odd.**

BEGIN

// Input: A number

INPUT number

// Check if the number is even or odd

IF (number % 2 == 0) THEN

OUTPUT "The number is even."

ELSE

OUTPUT "The number is odd."

END IF

END

**6.Write a Pseudo code to check whether a year is leap year or not.**

BEGIN

// Input: A year

INPUT year

// Check if the year is a leap year

IF (year % 4 == 0) THEN

// If the year is divisible by 4, check if it is also divisible by 100

IF (year % 100 == 0) THEN

// If divisible by 100, check if it is also divisible by 400

IF (year % 400 == 0) THEN

OUTPUT "The year is a leap year."

ELSE

OUTPUT "The year is not a leap year."

END IF

ELSE

OUTPUT "The year is a leap year."

END IF

ELSE

OUTPUT "The year is not a leap year."

END IF

END

7.Write a Pseudo code to check whether a character is alphabet or not.

BEGIN

// Input: A character

INPUT character

// Check if the character is an alphabet

IF (character >= 'A' AND character <= 'Z') OR (character >= 'a' AND character <= 'z') THEN

OUTPUT "The character is an alphabet."

ELSE

OUTPUT "The character is not an alphabet."

END IF

END

**8.Write a Pseudo code to input any alphabet and check whether it is vowel or consonant.**

BEGIN

// Input: A character

INPUT character

// Convert character to lowercase to simplify comparison

IF (character >= 'A' AND character <= 'Z') THEN

character = character + 32 // Convert uppercase to lowercase

END IF

// Check if the character is a vowel

IF (character == 'a' OR character == 'e' OR character == 'i' OR character == 'o' OR character == 'u') THEN

OUTPUT "The character is a vowel."

ELSE

OUTPUT "The character is a consonant."

END IF

END

**9.Write a Pseudo code to input any character and check whether it is alphabet, digit or special character.**

BEGIN

// Input: A character

INPUT character

// Check if the character is an alphabet

IF (character >= 'A' AND character <= 'Z') OR (character >= 'a' AND character <= 'z') THEN

OUTPUT "The character is an alphabet."

// Check if the character is a digit

ELSE IF (character >= '0' AND character <= '9') THEN

OUTPUT "The character is a digit."

// If it is neither an alphabet nor a digit, it is a special character

ELSE

OUTPUT "The character is a special character."

END IF

END

**10. Write a Pseudo code to check whether a character is uppercase or lowercase alphabet.**

BEGIN

// Input: A character

INPUT character

// Check if the character is an uppercase alphabet

IF (character >= 'A' AND character <= 'Z') THEN

OUTPUT "The character is an uppercase alphabet."

// Check if the character is a lowercase alphabet

ELSE IF (character >= 'a' AND character <= 'z') THEN

OUTPUT "The character is a lowercase alphabet."

// If it is neither, it is not an alphabet

ELSE

OUTPUT "The character is not an alphabet."

END IF

END

**11. Write a Pseudo code to input week number and print week day.**

BEGIN

// Input: Week number (1 to 7)

INPUT weekNumber

// Check the week number and print the corresponding weekday

IF weekNumber == 1 THEN

OUTPUT "Monday"

ELSE IF weekNumber == 2 THEN

OUTPUT "Tuesday"

ELSE IF weekNumber == 3 THEN

OUTPUT "Wednesday"

ELSE IF weekNumber == 4 THEN

OUTPUT "Thursday"

ELSE IF weekNumber == 5 THEN

OUTPUT "Friday"

ELSE IF weekNumber == 6 THEN

OUTPUT "Saturday"

ELSE IF weekNumber == 7 THEN

OUTPUT "Sunday"

ELSE

OUTPUT "Invalid week number. Please enter a number between 1 and 7."

END IF

END

**12. Write a pseudo code to input month number and print number of days in that month.**

BEGIN

// Input: Month number (1 to 12)

INPUT monthNumber

// Check the month number and print the number of days

IF monthNumber == 1 THEN

OUTPUT "31 days" // January

ELSE IF monthNumber == 2 THEN

// Check if it is a leap year to determine February's days

INPUT year

IF (year % 4 == 0 AND (year % 100 != 0 OR year % 400 == 0)) THEN

OUTPUT "29 days" // Leap year

ELSE

OUTPUT "28 days" // Non-leap year

END IF

ELSE IF monthNumber == 3 THEN

OUTPUT "31 days" // March

ELSE IF monthNumber == 4 THEN

OUTPUT "30 days" // April

ELSE IF monthNumber == 5 THEN

OUTPUT "31 days" // May

ELSE IF monthNumber == 6 THEN

OUTPUT "30 days" // June

ELSE IF monthNumber == 7 THEN

OUTPUT "31 days" // July

ELSE IF monthNumber == 8 THEN

OUTPUT "31 days" // August

ELSE IF monthNumber == 9 THEN

OUTPUT "30 days" // September

ELSE IF monthNumber == 10 THEN

OUTPUT "31 days" // October

ELSE IF monthNumber == 11 THEN

OUTPUT "30 days" // November

ELSE IF monthNumber == 12 THEN

OUTPUT "31 days" // December

ELSE

OUTPUT "Invalid month number. Please enter a number between 1 and 12."

END IF

END

**13. Write a pseudo code to count total number of notes in given amount.**

BEGIN

// Input: Total amount

INPUT amount

// Initialize count for each denomination

count100 = 0

count50 = 0

count20 = 0

count10 = 0

count5 = 0

count1 = 0

// Calculate the number of 100 denomination notes

IF amount >= 100 THEN

count100 = amount // 100

amount = amount % 100

END IF

// Calculate the number of 50 denomination notes

IF amount >= 50 THEN

count50 = amount // 50

amount = amount % 50

END IF

// Calculate the number of 20 denomination notes

IF amount >= 20 THEN

count20 = amount // 20

amount = amount % 20

END IF

// Calculate the number of 10 denomination notes

IF amount >= 10 THEN

count10 = amount // 10

amount = amount % 10

END IF

// Calculate the number of 5 denomination notes

IF amount >= 5 THEN

count5 = amount // 5

amount = amount % 5

END IF

// Calculate the number of 1 denomination notes

IF amount >= 1 THEN

count1 = amount // 1

amount = amount % 1

END IF

// Output the number of notes of each denomination

OUTPUT "Number of 100 denomination notes: " + count100

OUTPUT "Number of 50 denomination notes: " + count50

OUTPUT "Number of 20 denomination notes: " + count20

OUTPUT "Number of 10 denomination notes: " + count10

OUTPUT "Number of 5 denomination notes: " + count5

OUTPUT "Number of 1 denomination notes: " + count1

END

**14. Write a Pseudo code program to input angles of a triangle and check whether triangle is valid or not.**

BEGIN

// Input: Three angles of a triangle

INPUT angle1

INPUT angle2

INPUT angle3

// Check if the sum of angles is equal to 180 degrees

IF (angle1 + angle2 + angle3 == 180) THEN

OUTPUT "The triangle is valid."

ELSE

OUTPUT "The triangle is not valid."

END IF

END

**15. Write a Pseudo code to input all sides of a triangle and check whether triangle is valid or not.**

BEGIN

// Input: Three sides of a triangle

INPUT side1

INPUT side2

INPUT side3

// Check if the triangle is valid using the triangle inequality theorem

IF (side1 + side2 > side3) AND (side1 + side3 > side2) AND (side2 + side3 > side1) THEN

OUTPUT "The triangle is valid."

ELSE

OUTPUT "The triangle is not valid."

END IF

END

**16. Write a Pseudo code to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following: Percentage >= 90% : Grade A**

**Percentage >= 80% : Grade B**

**Percentage >= 70% : Grade C**

**Percentage >= 60% : Grade D**

**Percentage >= 40% : Grade E**

**Percentage < 40% : Grade F**

BEGIN

// Input: Marks of five subjects

INPUT physics

INPUT chemistry

INPUT biology

INPUT mathematics

INPUT computer

// Calculate the total marks and percentage

totalMarks = physics + chemistry + biology + mathematics + computer

percentage = (totalMarks / 500) \* 100

// Determine the grade based on the percentage

IF percentage >= 90 THEN

grade = "A"

ELSE IF percentage >= 80 THEN

grade = "B"

ELSE IF percentage >= 70 THEN

grade = "C"

ELSE IF percentage >= 60 THEN

grade = "D"

ELSE IF percentage >= 40 THEN

grade = "E"

ELSE

grade = "F"

END IF

// Output the percentage and grade

OUTPUT "Percentage: " + percentage

OUTPUT "Grade: " + grade

END

**17. Write a Pseudo code to input basic salary of an employee and calculate its Gross salary according to following:**

**Basic Salary <= 10000 : HRA = 20%, DA = 80%**

**Basic Salary <= 20000 : HRA = 25%, DA = 90%**

**Basic Salary > 20000 : HRA = 30%, DA = 95%**

BEGIN

// Input: Basic salary of the employee

INPUT basicSalary

// Initialize HRA and DA

hra = 0

da = 0

// Determine HRA and DA based on the basic salary

IF basicSalary <= 10000 THEN

hra = basicSalary \* 0.20

da = basicSalary \* 0.80

ELSE IF basicSalary <= 20000 THEN

hra = basicSalary \* 0.25

da = basicSalary \* 0.90

ELSE

hra = basicSalary \* 0.30

da = basicSalary \* 0.95

END IF

// Calculate gross salary

grossSalary = basicSalary + hra + da

// Output the HRA, DA, and gross salary

OUTPUT "HRA: " + hra

OUTPUT "DA: " + da

OUTPUT "Gross Salary: " + grossSalary

END

**18. Write a Pseudo code to input electricity unit charges and calculate total electricity bill according to the given condition:**

**For first 50 units Rs. 0.50/unit**

**For next 100 units Rs. 0.75/unit**

**For next 100 units Rs. 1.20/unit**

**For unit above 250 Rs. 1.50/unit**

**An additional surcharge of 20% is added to the bill**

BEGIN

// Input: Number of electricity units used

INPUT units

// Initialize bill amount

billAmount = 0

// Calculate the bill based on unit ranges

IF units <= 50 THEN

billAmount = units \* 0.50

ELSE IF units <= 150 THEN

billAmount = (50 \* 0.50) + ((units - 50) \* 0.75)

ELSE IF units <= 250 THEN

billAmount = (50 \* 0.50) + (100 \* 0.75) + ((units - 150) \* 1.20)

ELSE

billAmount = (50 \* 0.50) + (100 \* 0.75) + (100 \* 1.20) + ((units - 250) \* 1.50)

END IF

// Add surcharge of 20%

surcharge = billAmount \* 0.20

totalBill = billAmount + surcharge

// Output the total electricity bill

OUTPUT "Total Electricity Bill: " + totalBill

END