MCQs

Q1. Ans - A) "Invalid input"
Q2. Ans - A) "Error: Not a positive integer"
Q3. Ans - A) "Result: Infinity"
Q4. Ans - B) [1, 4, 9, 16, 25]
Q5. Ans - A) 2
Q6. Ans - A) {1, 2, 3, 5, 6, 7, 9, 10}
Q7. Ans - B) 20
Q8. Ans -A) !dlroW ,olleH
Q9. Ans - B) 3
Q10. Ans - D) ValueError
Q11. Ans - B) 15
Q12. Ans - B) TypeError
Q13. Ans - A) 5.0 Done
Q14. Ans - B) 5
Q15. Ans - A) [1,2,3,4]
Q16. Ans - B) [2,4]
Q17. Ans - A) Hello Alice
Q18. Ans - B) 11
Q19. Ans - C) 120
Q20. Ans - B) 3
Q21. Ans - A) True
Q22. Ans - B) “HELLO, ALICE”
Q23. Ans - A) “Time taken: 2.0 seconds”
Q24. Ans - A) “Arguments: 3, 4, Result: 7”
Q25. Ans - B) 55
Q26. Ans - D) admin panel accessed. Access Denied
Q27. Ans - D) “Max Attempts reached”

PROGRAMMING

Q5. Circular picnic

```
def maxContiSum(arr):
        sum = 0
         for i in arr:
               sum += i

          print(sum)

arr = [10, -4, 1, 3, 3]
maxContiSum(arr)
```

Q6. Maximum Subarray Sum

```
def maxSum(a, size):
    newMax = -1
    max= 0

    for i in range(0, size):
        max = max + a[i]
        if (newMax < max):
            newMax = max

        if max < 0:
            max = 0
    print(newMax)
arr = [-2, 1, -3, 4, -1, 2, 1, -5, 4]
maxSum(arr, len(arr))
```

Q7. Longest Common Subsequence

```
def lonComSeq(a, b, m, n):

    if m == 0 or n == 0:
        return 0;
    elif a[m-1] == b[n-1]:
        return 1 + lonComSeq(a, b, m-1, n-1);
    else:
        return max(lonComSeq(a, b, m, n-1), lonComSeq(a, b, m-1, n));



text1 = "AGGTAB"
text2 = "GXTXAYB"
print(lonComSeq(text1, text2, len(text1), len(text2)))
```

Q8. Matrix Spiral Order

```
def spiralPrint(m, n, a):
    k = 0
    l = 0

    ''' k - starting row index
        m - ending row index
        l - starting column index
        n - ending column index '''
```

```
    while (k < m and l < n):
        for i in range(l, n):
            print(a[k][i], end=" ")
        k += 1


        for i in range(k, m):
            print(a[i][n - 1], end=" ")
        n -= 1

        if (k < m):
            for i in range(n - 1, (l - 1), -1):
                print(a[m - 1][i], end=" ")
            m -= 1

        if (l < n):
            for i in range(m - 1, k - 1, -1):
                print(a[i][l], end=" ")
            l += 1


# Driver Code
a = [[1,2,3],
     [4,5,6],
     [7,8,9]]

row = 3
col = 3
spiralPrint(row, col, a)
```

Q1. Employee Performance Evalution

```
def checkPerformance(emp):
    per = []
    for i in emp:
        a = {}
        a["name"] = i["name"]
        a["performance_score"] = i["scores"]['Quality of
Work']*i["weights"]["Quality of Work"] + i["scores"]["Team
Collaboration"]*i["weights"]["Team Collaboration"]
        per.append(a)

    print(per)



employees = [
    {"name": "John", "scores": {"Quality of Work": 90, "Team Collaboration":
80}, "weights": {"Quality of Work": 0.6, "Team Collaboration": 0.4}},
    {"name": "Alice", "scores": {"Quality of Work": 85, "Team Collaboration":
95}, "weights": {"Quality of Work": 0.5, "Team Collaboration": 0.5}}
]

checkPerformance(employees)
```