25ESCS01- INTRODUCTION TO PROBLEM SOLVING
CONTINIOUS ASSESSMENT – 3 & 4

EXAM DATE: 19/11/25 (WEDNESDAY)

SET: 2 Admission Number: JUUGI202511830

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Q1: if..else

Code:

if else.py > ...

```python
tic = int(input("enter the number of ticket: "))
seat =int(input("enter the number of seates: "))

if tic % 2 != 0:
    print("Invalid ticket count")
elif tic > seat:
    print("insufficient seats")
else:
    seat -= tic
    print("!!!seat reserved!!!")
    print("seats available : ", seat)

```

Output:

```
enter the number of ticket: 6
enter the number of seates: 20
!!!seat reserved!!!
seats available :  14
```

Q2: for

Code:

for loop question.py

```python
n = int(input("enter the value of n:"))
sum = 0
for i in range(1, n+1):
    if i % 3 == 0:
        sum += i
print(sum)
```

Output:

```
enter the value of n:20
63
```

Q1: while

Code:

while.py

```python
n = int(input("enter a value of n:"))
while n > 9:
    s = 0
    temp = n
    while temp > 0:
        s += temp % 10
        temp //= 10
    n = s

print(n)
```

Output:

```
enter a value of n:234
9
```

Q1: functions

Code:

function.py > ...

```
1
2   def is_perfect(n):
3       s = 0
4       for i in range(1, n):
5           if n % i == 0:
6               s += i
7       return s == n
8
9   n = int(input("enter a number :"))
10  print(is_perfect(n))
```

Output:

```
PS C:\Users\jhakk\OneD
enter a number :6
True
PS C:\Users\jhakk\OneD
enter a number :8
False
PS C:\Users\jhakk\OneD
```

Q1: list

Code:

list question.py > ...

```python
n = int(input("enter the list size: "))
a = []
for i in range(n):
    a.append(int(input()))
s = 0
c = 0
for i in a:
    if i % 2 == 0:
        s += i
    else:
        c += 1
list1 = a[:]
list2 = a[:]
list2.append(s)
list3 = a[:]
list3.insert(1, c)
list4 = list3[:3]

print("Original List:", list1)
print("List after appending sum of even numbers:", list2)
print("List after inserting count of odd numbers at index 1:", list3)
list3.pop()
print("List after removing last element:", list3)
print("First 3 elements:", list4)
total = sum(a)
print("total is:", total)
avg = total / len(a)
print("Average:", avg)
```

Output:

```
enter the list size: 5
1
3
5
2
4
Original List: [1, 3, 5, 2, 4]
List after appending sum of even numbers: [1, 3, 5, 2, 4, 6]
List after inserting count of odd numbers at index 1: [1, 3, 3, 5, 2, 4]
List after removing last element: [1, 3, 3, 5, 2]
First 3 elements: [1, 3, 3]
total is: 15
Average: 3.0
```