



SUPERIOR UNIVERSITY

Artificial Intelligence (Lab)

Assignment - 4

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Department:

Software Engineering Department.

Program:

Artificial Intelligence.

Section:

BSAI-3A

Question # 1:

Code for LUHN Algorithm

Code:

```
def LHUN():  
    card=input("Enter the Card Number: ")  
    total=0  
    reverse_card=card[::-1]  
    for i in range (len(reverse_card)):  
        num=int(reverse_card[i])  
        if i%2==1:  
            num*=2  
            if num>9:  
                num-=9  
            total+=num  
        if total%10==0:  
            print("Valid Card.")  
    else:  
        print("Invalid Card.")  
LHUN()
```

Output:

```
E:\Uni\3rd Semester\2) Artificial Intelligence (Lab)\Assignments\Assignment 4>python task.py  
Enter the Card Number: 4782780021055119  
Valid Card.
```

Question # 2:

Remove Punctuations from UserInput String (without using remove function)

Code:

```
def puncutations():  
    print("This program will be used to remove all the strings from the sentence.")  
    input1=input("Enter the sentence: ")  
    kick={" ",".", "?", ",", "!", "(", ")", "[", "]", "{", "}", "\"", "\'", "`", "@", "/", "\\", "^"}  
    for i in input1:  
        if i in kick:  
            input1=input1.replace(i,"")  
    print(input1)  
puncutations()
```

Output:

```
E:\Uni\3rd Semester\2) Artificial Intelligence (Lab)\Assignments\Assignment 4>python task.py  
This program will be used to remove all the strings from the sentence.  
Enter the sentence: If the number is divisible by 3, instead of saying the number, the player should say, "Fizz".  
If the number is divisible by 3 instead of saying the number the player should say Fizz
```

Question # 3:

Sort text (word) in Alphabetical Order (without using sort function) can use ASCII

Code:

```
def order():  
    lines=input("Enter the sentence: ")  
    word=lines.split()  
  
    for i in range(len(word)-1):  
        for j in range(len(word)-i-1):  
            if word[j]>word[j+1]:  
                word[j],word[j+1]=word[j+1],word[j]  
  
    sorted_lines=" ".join(word)  
    print(f"Sorted Lines: {sorted_lines}")  
order()
```

Output:

```
E:\Uni\3rd Semester\2) Artificial Intelligence (Lab)\Assignments\Assignment 4>python task.py  
Enter the sentence: Hi My Name Is Ali Hello World  
Sorted Lines: Ali Hello Hi Is My Name World
```