

**Assignment -1**  
Python Programming

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Question 1.

Consider a list (list = []). You can perform the following commands: insert i e: Insert integer at position . print: Print the list. remove e: Delete the first occurrence of integer . append e: Insert integer at the end of the list. sort: Sort the list. pop: Pop the last element from the list. reverse: Reverse the list. Initialize your list and read in the value of followed by lines of commands where each command will be of the types listed above. Iterate through each command in order and perform the corresponding operation on your list

```
if __name__ == '__main__':  
    N = int(input())  
    command=[]  
    for i in range(N):  
        command.append(input().split())  
    result=[]  
    for i in range(N):  
        if command[i][0]=='insert':  
            result.insert(int(command[i][1]),int(command[i][2]))  
        elif command[i][0]=='print':  
            print(result)  
        elif command[i][0]=='remove':  
            result.remove(int(command[i][1]))  
        elif command[i][0]=='append':  
            result.append(int(command[i][1]))  
        elif command[i][0]=='pop':  
            result.pop()  
        elif command[i][0]=='sort':  
            result.sort()  
        elif command[i][0]=='reverse':  
            result.reverse()
```

## Question 2.

Write a Calculator program in Python?

```
def add(x, y):
    return x + y

def subtract(x, y):
    return x - y

def multiply(x, y):
    return x * y

def divide(x, y):
    return x / y

print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

while True:

    # take input from the user
    choice = input("Enter choice(1/2/3/4): ")

    # check if choice is one of the four options
    if choice in ('1', '2', '3', '4'):

        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))

        if choice == '1':
            print(num1, "+", num2, "=", add(num1, num2))
```

```

elif choice == '2':
    print(num1, "-", num2, "=", subtract(num1, num2))

elif choice == '3':
    print(num1, "*", num2, "=", multiply(num1, num2))

elif choice == '4':
    print(num1, "/", num2, "=", divide(num1, num2))
    next_calculation = input("Do you want to continue? (yes/no): ")
    if next_calculation == "no":
        break

else:
    print("Invalid Input")

```

### Question-3:

Write a program to concatenate, reverse and slice a string?

```

n1="Afra"
n2="Thahseen"
print("concatenated string:")
print((n1+n2))

```

```

str='Afra Thahseen'
print("Reversed string:")
print((str[::-1]))

```

```

str='Welcome to IBM'
print("Sliced string:")

```

```
print((str[2:14]))
```

Question 4.

Why is Python a popular programming language?

Python is a popular programming language because python is the best language to learn for the beginners and it supports wide range of applications from simple text processing to worldwide web browsers to games

Question-5:

What are the other Frameworks that can be used with python?

- CubicWeb
- Django
- Flask
- AIOHTTP
- Dash
- Bottle
- CherryPy
- Falcon
- Pyramid etc.,

Question-6:

Full form of WSGI?

Full form of WSGI is Web Server Gateway Interface