

Assignment 2

```
{
  "cells": [
    {
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "#### Write a Calculator program in Python?"
      ]
    },
    {
      "cell_type": "code",
      "execution_count": 1,
      "metadata": {},
      "outputs": [],
      "source": [
        "class Calculator:\n",
        "    def add(self, a, b):\n",
        "        return a+b\n",
        "    def sub(self, a, b):\n",
        "        return a-b\n",
        "    def mult(self, a, b):\n",
        "        return a*b\n",
        "    def div(self, a, b):\n",
        "        return a/b"
      ]
    },
    {
      "cell_type": "code",
      "execution_count": 2,
      "metadata": {},

```

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"outputs": [
  {
    "name": "stdout",
    "output_type": "stream",
    "text": [
      "6\n"
    ]
  }
],
"source": [
  "c = Calculator()\n",
  "print(c.add(2, 4))"
],
},
{
  "cell_type": "markdown",
  "metadata": {},
  "source": [
    "#### Write a program to concatenate, reverse and slice a string?"
  ],
},
{
  "cell_type": "code",
  "execution_count": 3,
  "metadata": {},
  "outputs": [],
  "source": [
    "class String:\n",
    "    def concat(self, a, b):\n",
    "        return a+b\n",
    "    def reverse(self, s):\n",

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"    return s[::-1]\n",
"    def slicestr(self, s, start, end):\n",
"    return s[start:end+1]"
]
},
{
"cell_type": "code",
"execution_count": 6,
"metadata": {},
"outputs": [
{
"name": "stdout",
"output_type": "stream",
"text": [
"amku\n"
]
}
],
"source": [
"s = String()\n",
"print(s.slicestr('ramkumar', 1, 4))"
]
},
{
"cell_type": "markdown",
"metadata": {},
"source": [
"##### Why is Python a popular programming language?"
]
},
{

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```
"cell_type": "markdown",
```

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"metadata": {},
```

```
"source": [
```

```
    "It uses a simplified syntax with an emphasis on natural language, for a much easier learning curve for  
    beginners. And, because Python is free to use and is supported by an extremely large ecosystem of libraries  
    and packages, it's often the first-choice language for new developers."
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]
```

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},
```

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{
```

```
    "cell_type": "markdown",
```

```
    "metadata": {},
```

```
    "source": [
```

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

```
]
```

```
},
```

```
{
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```
    "cell_type": "markdown",
```

```
    "metadata": {},
```

```
    "source": [
```

```
        "Pyramid, TurboGears, Web2py, CherryPy, Flask, Sanic"
```

```
]
```

```
},
```

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{
```

```
    "cell_type": "markdown",
```

```
    "metadata": {},
```

```
    "source": [
```

```
        "##### Full form of WSGI"
```

```
]
```

```
},
```

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{
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```
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```
    "metadata": {},
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"source": [

    "The Web Server Gateway Interface is a simple calling convention for web servers to forward requests to web applications or frameworks written in the Python programming language."

]
},
{
    "cell_type": "markdown",
    "metadata": {},
    "source": [

        "##### Consider a list (list = []). You can perform the operations"

    ]
},
{
    "cell_type": "code",
    "execution_count": 15,
    "metadata": {},
    "outputs": [],
    "source": [

        "class List:\n",
        "    def __init__(self):\n",
        "        self.l = []\n",
        "    def insert(self, a, pos):\n",
        "        if pos <= len(self.l):\n",
        "            self.l.insert(pos, a)\n",
        "        else:\n",
        "            print('position out of range')\n",
        "        return\n",
        "    return self.l\n",
        "    def remove(self, a):\n",
        "        self.l.remove(a)\n",
        "        return self.l\n",
        "    def append(self, a):\n",

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        self.l.append(a)\n",
        returnself.l\n",
        def sort(self):\n",
        returnself.l\n",
        def pop(self):\n",
        returnself.l.pop()\n",
        def reverse(self):\n",
        returnself.l[::-1]"
    ]
},
{
    "cell_type": "code",
    "execution_count": 25,
    "metadata": {},
    "outputs": [
        {
            "name": "stdout",
            "output_type": "stream",
            "text": [
                "[11]\n",
                "[11, 12]\n",
                "[12]\n",
                "[12, 13]\n",
                "[12, 13, 15]\n",
                "[12, 13, 15]\n",
                "15\n",
                "[13, 12]\n"
            ]
        }
    ],
    "source": [

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"li = List()\n",
"print(li.insert(11, 0))\n",
"print(li.insert(12, 1))\n",
"print(li.remove(11))\n",
"print(li.append(13))\n",
"print(li.append(15))\n",
"print(li.sort())\n",
"print(li.pop())\n",
"print(li.reverse())"
]
},
{
"cell_type": "code",
"execution_count": null,
"metadata": {},
"outputs": [],
"source": []
},
{
"cell_type": "code",
"execution_count": null,
"metadata": {},
"outputs": [],
"source": []
}
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"kernel_spec": {
"display_name": "Python 3",
"language": "python",
"name": "python3"
}
}

```

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  "language_info": {  
    "codemirror_mode": {  
      "name": "ipython",  
      "version": 3  
    },  
    "file_extension": ".py",  
    "mimetype": "text/x-python",  
    "name": "python",  
    "nbconvert_exporter": "python",  
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    "version": "3.8.5"  
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},  
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  "nbformat_minor": 4  
}
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