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Code

Stuffing Function

```python
def Stuff(inp = "110111111011111010"):
    stuff = ""
    c = 0
    print("Input is:", inp)
    for bit in inp:
        if bit == "1":
            c += 1
        else:
            c = 0
        stuff += bit
        if c == 5:
            stuffed += "0"
            c = 0
    print("Bit Stuffed Output is:", stuff)
    return stuff
```

Destuffing Function

```python
def Destuff(inp = ""):
    print("Stuffed Input is", inp)
    destuff = ""
    c = 0
    i = 0
    while i < len(inp):
        destuff += inp[i]
        if inp[i] == "1":
            c += 1
        else:
            c = 0
        if c == 5:
            i += 1
            c = 0
        i += 1
    print("Bit Destuffed Output is:", destuff)
    return destuff
```

Main

```python
def main():
    inp = input("Enter Input (Blank for default): ")
    if inp != "":
        print("------------In-------------")
        out = Stuffing(inp=inp)
        print("------------Out------------")
        Destuff(inp=out)
```

```python
        else:
            print("Using Defaults")
            print("------------In------------")
            out = Stuff(inp="011111")
            print("------------Out------------")
            Destuff(inp=out)
        pass
if __name__ == '__main__':
    main()
```

Output

```
Enter Input (Blank for default):
Using Defaults
------------In------------
Input is: 110111111011111010
Bit Stuffed Output is: 110111110101111110010
------------Out------------
Stuffed Input is 110111110101111110010
Bit Destuffed Output is: 110111111011111010
```