CSE111: Programming Language II

Midterm Exam

In [ ]:

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In [ ]:

In [3]:
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#Problem 01

#problem 01

my_tuple = (("Mominul", 1101),("Mustafiz", 1202),("Bell", 2101),("Cook"
2103),("Smith", 3101),("Finch", 3102),("Starc", 3203), ("Imrul", 1103),
("Taijul", 1204))


ban = {}
aus = {}
eng = {}

for i in my_tuple:
    x = str(i[1])
    if x[0] == '1':
        if x[1] == '1':
            y = ()
            y = y + (i[0],)
            ban['Batters'] = y
        elif x[1] == '2':
            y = ()
            y = y + (i[0],)
            ban['Bowlers'] = y
        else:
            pass
    elif x[1] == '2':
        if x[1] == '1':
            y = ()
            y = y + (i[0],)
            eng['Batters'] = y
        elif x[1] == '2':
            y = ()
            y = y + (i[0],)
            eng['Bowlers'] = y
        else:
            pass
    elif x[0] == '3':
        if x[1] == '1':
            y = ()
            y = y + (i[0],)
            aus['Batters'] = y
        elif x[1] == '2':
            y = ()
            y = y + (i[0],)
            aus['Bowlers'] = y
        else:
            pass

dic1 = {
        "Bangladesh": ban,
        "England": eng,
        "Australia":aus

        }
print(dic1)
```

```
{'Bangladesh': {'Batters': ('Imrul',), 'Bowlers': ('Taijul',)}, 'Engla
nd': {'Bowlers': ('Starc',)}, 'Australia': {'Batters': ('Finch',)}}
```

In [ ]:

In [2]:
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#Problem 02



class TechShop:
    def __init__(self, name):
        self.name = name
        self.count = 0
        list1 = []
    def addProduct(self, product):
        if product[2] == None:
            print("A product without code cannot be added.")
        else:
            print(f"Product with Code: {product[2]} added")
            self.count = self.count + 1
            list1.append(product)

    def printProducts(self):
        print("Total products:", self.count)
        for i in list1:
            print(f"Product name:{i[0]} Category:{i[1]} Product Code:{i

class Product:
    def __init__(self, p_name, p_type = None, p_id = None):
        self.name = p_name
        self.type = p_type
        self.id = str(p_id)

    def __str__(self):
            return [self.name, self.type, self.id]


#print(Product('a', 'b', 5))
obj = TechShop("Star Tech")
p1 = Product("Core i7 11700","Processor",16039)
print("================================")
obj.addProduct(p1)
print("================================")
obj.printProducts()
print("================================")
p2 = Product("Ryzen 5900X","Processor")
p3 = Product("ASRock B550 Taichi","Motherboard",18080)
print("================================")
obj.addProduct(p2,p3)
print("================================")
obj.printProducts()
print("================================")
p2.setCode(17699)
print("================================")
obj.addProduct(p2)
print("================================")
obj.printProducts()
print("================================")
p4 = Product("ASUS ROG Strix Z390-F","Motherboard",8694)
p5 = Product("ASUS ROG Strix RTX3080","GPU",17071)
print("================================")
```

```
obj.addProduct(p4,p5)
print("================================")
obj.printProducts()
print("================================")
```

In [ ]: