prob1.py

```python

def main():

    name ="Nayan Raj"
    reg = 2347240
    para = f'My name is {name}, I have choose "University canteen management" as my domain my registration number is {reg}, from MCA section B'

    word = "my"
    frequency = count_word_frequency(para, word)
    print(f"The word '{word}' appears {frequency} times in the paragraph.")


def count_word_frequency(paragraph, word):
    words_list = paragraph.split()
    count = 0
    for w in words_list:
        if w.lower().strip('.,') == word.lower().strip('.,'):
            count += 1
    return count

main()
```

prob2.py

```python
from re import split

def get_datatype(element):
    try:
        int(element)
        return "int"
    except ValueError:
        pass

    try:
        float(element)
        return "float"
    except ValueError:
        pass

    return "string"


def main():
    name ="Nayan Raj"
    reg = 2347240
    year = 2023
    para = f'My name is {name}, I have choose "University canteen Management" as my domain my registration number is {reg}, from MCA section B {year}'

    words = split(" |, ", para)
    print("Data Types of Selected Specific Elements:")
    for word in words:
        datatype = get_datatype(word)
        print(f"{word} - {datatype}")

main()
```

prob3.py

```python



def main():

    alpha, numeric, special = 0, 0, 0
    name ="Nayan Raj"
    reg = 2347240
    year = 2023
    para= f'My name is {name}, I have choose "University Canteen Management" as my domain my registration number is {reg}, @ from MCA section B {year}'
    alphabet,num,special_ch=0,0,0
    for x in para:
        if x.isalpha():
            alphabet+=1
        elif x.isdigit():
            num+=1
        elif not x.isspace():
            special_ch+=1



    print(f"Number of int characters in the paragraph: {num}")
    print(f"Number of String characters in the paragraph: {alphabet}")
    print(f"Number of special characters in the paragraph: {special_ch}")


main()

```

prob4.py

```python

# order set = {food_item_id,food_item_name,price,avaibility}
order = {101, "chicken wrap",200.00, True}

'''
    pop(): Removes random item from the set

'''
order.pop()
print("pop() : ",order)

# order set = {food_item_id, Fppd_item_name, avaibility(T/F)}
order = {101, "chicken wrap", 200.00, True}
'''
    clear(): Removes all elements in a set.
'''
order.clear()
print("clear() : ", order)

# order set = {food_item_id, Fppd_item_name, avaibility(T/F)}
order= {101, "chicken wrap", 200.00, True}
'''
    discard(): Similar to remove() just that discard() does not raises
    an error if the value entered does not exsist.
'''
order.discard("p")
print("discard(<value>) : ", order)

# order set = {food_item_id, Food_item_name, avaibility(T/F)}
order = {101, "chicken wrap", 200.00, True}
p1={101,"nayan"}
'''
    del : Deletes the set event,  so print(event) will raise an error
'''
del (order)


print(p1)
```

prob5.py

```python
order = set()
order_details = {"id", "food item", "price", "avaibility","salary"}
order.update(order_details)

print(order)

# Arranging in decending order

sorted_list = sorted(order, reverse=True)

print(sorted_list)
```

prob6.py

```
order = {"order_id", "food_item", "price", "avaibility"}

d1, d2, d3, d4 = order

print(d1)
print(d2)
print(d3)
print(d4)

```

prob7.py

```python
domain = input("Enter your domain name : ")
domain = domain.replace(" ","")
t = tuple(domain)

letter = input("Eneter the letter to search : ")
count = 0

for i in range(len(domain)):
    if letter == t[i]:
        count += 1

print("Count = ", count)

```

prob8.py

```python
domain = input("Enter your domain name : ")
list = list(domain.replace(" ",""))

print(list, end="\n\n")
# Positive indexing and slicing
print("Positive indexing and slicing:")
print("Character at index 0:", domain[0])
print("Characters from index 1 to 3:", domain[1:4])
print("Characters from index 2 onwards:", domain[2:])

# Negative indexing and slicing
print("\nNegative indexing and slicing:")
print("Character at index -1:", domain[-1])
print("Characters from index -4 to -2:", domain[-4:-1])
print("Characters except the last one:", domain[:-1])

# Using negative step in slicing
print("\nUsing negative step:")
print("Reverse the string:", domain[::-1])
print("Every second character in reverse:", domain[::-2])

```