1. Password validator

length,upper,lower,num=0,0,0,0

password = input()

for i in range(len(password)):

if len(password)>=8:

length=1

if password[i].isupper():

upper=1

if password[i].islower():

lower=1

if password[i].isnumeric():

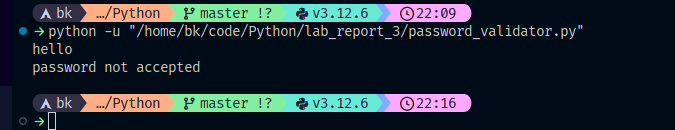
num=1

if (length+upper+lower+num)>=4:

print("password accepted")

else:

print("password not accepted")



2. Divisible by 3 or 5

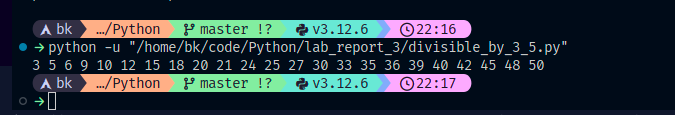
for i in range(1,51):

if i%3 != 0 and i%5 !=0:

continue

else:

print(i,*end*=' ')



3. Positive number sum

sum=0

while True:

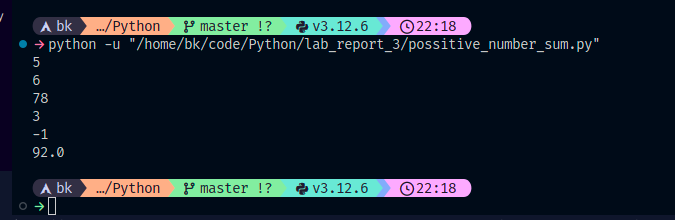
num=float(input())

if(num<0):

break

sum=sum+num

print(sum)



4. Word palindrome

while True:

str=input()

if str=='stop':

break

if len(str)<3:

print("skipped")

continue

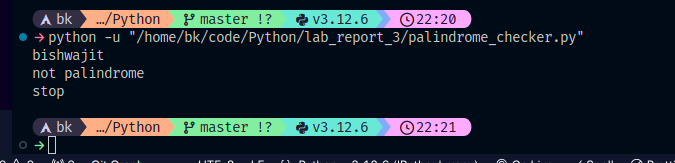
for i in range(len(str)):

if str[i]!=str[len(str)-1-i]:

print("not palindrome")

break

print("palindrome")



5. Vowel counter

str=input()

str=str.lower()

vowel\_list=['a','e','i','o','u']

vowel\_count=0

for i in range(len(str)):

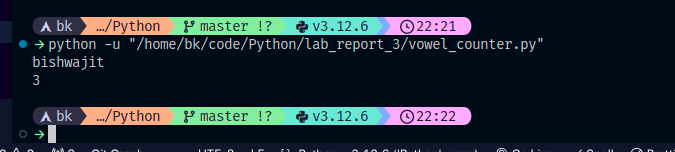
if str[i] not in vowel\_list:

continue

else:

vowel\_count+=1

print(vowel\_count)



6. Unique character

str=input()

str\_set=set()

break\_=False

index=0

for i in range(len(str)):

if str[i] not in str\_set:

str\_set.add(str[i])

else:

index=i

break\_=True

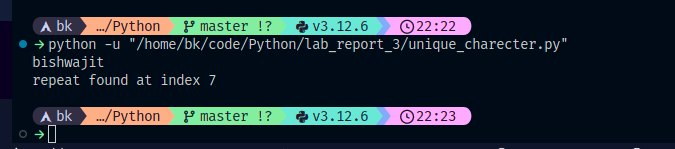
break

if break\_:

print("repeat found at index",index)

else:

print('repeat not found')



7. Student information system

students = {}

*def* display\_student\_data():

if len(students)==0:

print("No Students")

return

for student in students.values():

print(*f*"Name: {student['name']}")

print(*f*"Roll No: {student['roll\_no']}")

print(*f*"Age: {student['age']*:.2f*}")

while True:

print("\nChoose an option:")

print("1. Add Student")

print("2. Display Student Data")

print("3. Exit")

choice = input("Enter your choice (1/2/3): ")

name\_input=""

roll\_no\_input=0

age\_input=0.00

if choice == '1':

checker = int(input("enter 1 for enter name: "))

if checker==1:

name\_input = input("Enter student's name: (max 5 characters): ")

else:

print("Invalid choice")

checker = int(input("enter 1 for enter roll: "))

if checker==1:

roll\_no\_input = int(input("Enter student's Roll No: "))

else:

print("Invalid choice")

checker = int(input("enter 1 for enter age: "))

if checker==1:

age\_input = float(input("Enter student's age (float): "))

else:

print("Invalid choice")

students[roll\_no\_input] = { "name": name\_input, "roll\_no": roll\_no\_input, "age": age\_input }

print("Student added.")

elif choice == '2':

display\_student\_data()

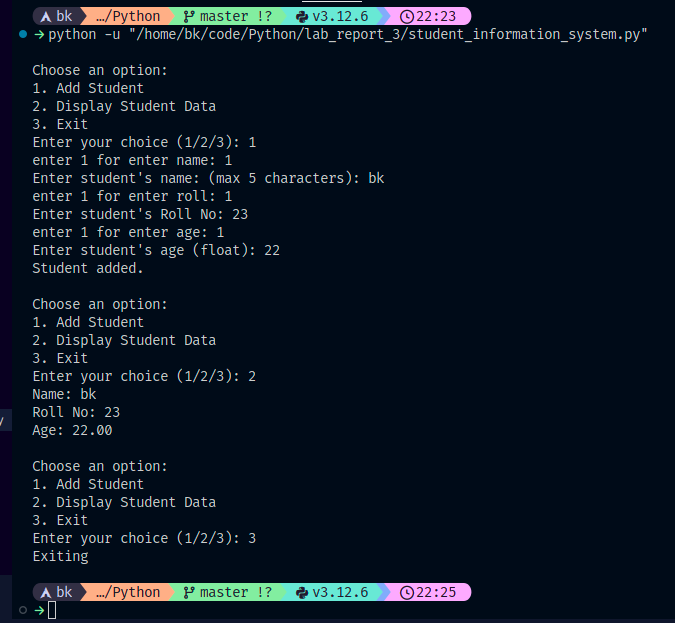
elif choice == '3':

print("Exiting")

break

else:

print("Invalid choice")



8. Grocery shop

grocery\_items = {}

while True:

print("\nChoose an option:")

print("1. Add Item")

print("2. Remove Item")

print("3. View Basket")

print("4. Exit")

choice = input("Enter your choice (1/2/3/4): ")

if choice == '1':

item = input("Enter item: ")

if item in grocery\_items:

print("already exists")

else:

grocery\_items[item] = 1

print("item added")

elif choice == '2':

item = input("Enter the item name to remove: ")

if item not in grocery\_items:

print("item not found")

else:

del grocery\_items[item]

print("item removed")

elif choice == '3':

if len(grocery\_items)==0:

print("empty")

else:

print("items list:")

for item, count in grocery\_items.items():

print(*f*" {item}: {count}")

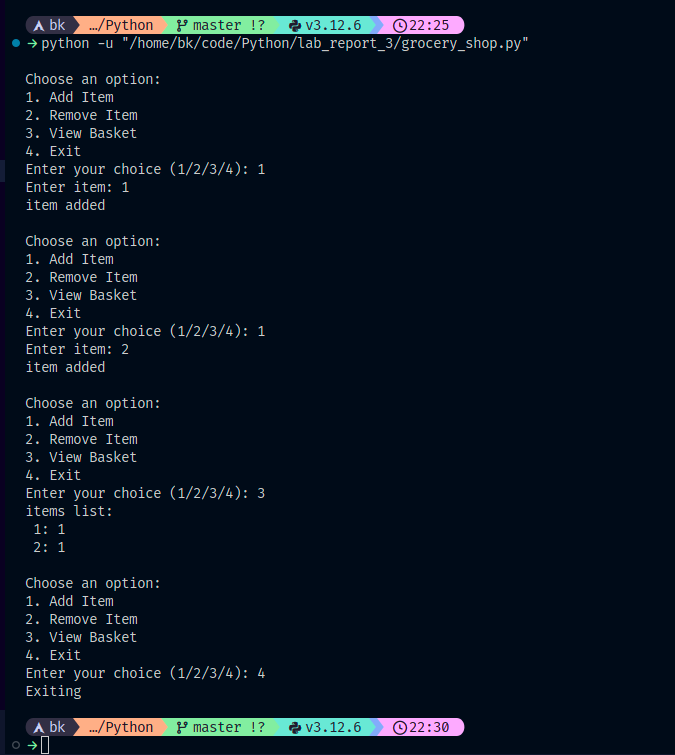
elif choice == '4':

print("Exiting")

break

else:

print("invalid choice")



9. Lexicographical order

list\_size=int(input("size of list: "))

set\_of\_char=set()

for i in range(list\_size):

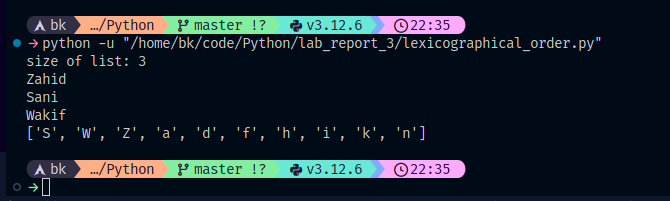
new\_string=input()

for char in new\_string:

if char not in set\_of\_char:

set\_of\_char.add(char)

print(sorted(set\_of\_char))



10. Minimum cost

products = {

"Rice": [45, 42, 41, 40],

"Salt": [34, 35, 36, 36],

"Fish": [200, 202, 201, 205],

"Orange": [100, 99, 101, 102]

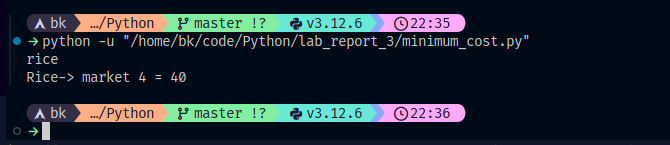
}

product=input().capitalize()

min\_price=min(products[product])

place\_of\_min=products[product].index(min\_price)+1

print(*f*"{product}-> market {place\_of\_min} = {min\_price}")



11. Email generator

student\_number=int(input())

for i in range(student\_number):

name=input()

name=name.strip()

if(len(name)>20):

print("name has more than 20 char")

continue

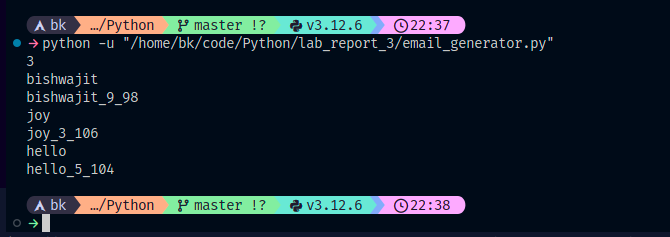
lower=name.lower()

length=len(name)

first\_char\_ascii=ord(name[0])

email=*f*'{lower}\_{length}\_{first\_char\_ascii}'

print(email)



12. compressed string

number\_of\_string=int(input("enter how many string: "))

size\_of\_string=int(input("enter size of string: "))

compressed=[]

for i in range(number\_of\_string):

string=input()

if len(string)>size\_of\_string:

string=string[:size\_of\_string]

new\_compressed=''

count=1

for i in range(1,len(string)):

if string[i]==string[i-1]:

count+=1

else:

if count >= 1:

new\_compressed+= str(count)+string[i-1]

else:

new\_compressed+=string[i-1]

count=1

if count>=1:

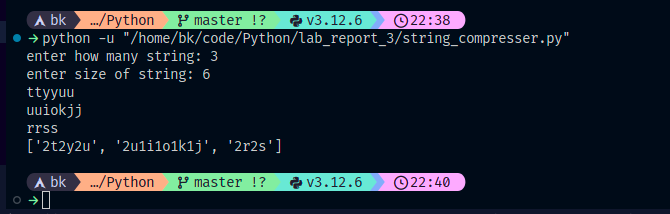
new\_compressed+=str(count)+string[-1]

else:

new\_compressed+=string[-1]

compressed.append(new\_compressed)

print(compressed)



13. To do list

dict={}

while True:

choice = int(input("1 for add task\n2 for mark task completed\n3 for display all task\n--> "))

i=1

if choice==1:

task=input("add your task: ")

dict[i]=[task,False]

i+=1

elif choice==2:

task\_no=int(input("enter task no: "))

dict\_list=dict[task\_no][1]=True

print("update done")

print(dict)

print()

elif choice==3:

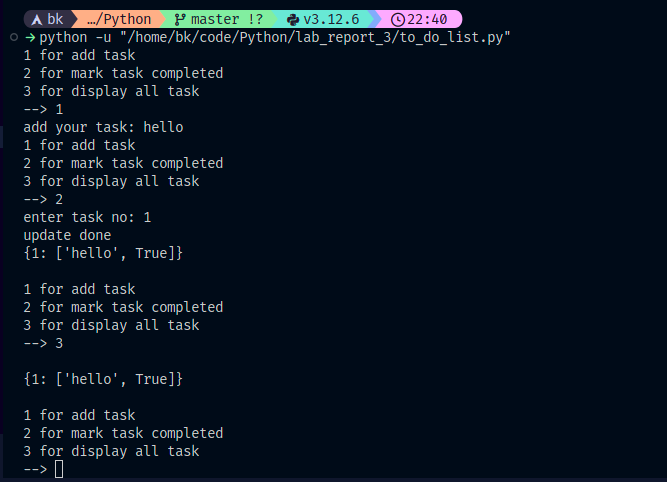
print()

print(dict)

print()

else:

print("wrong choice try again")



14. Rotate password

m=int(input("Size of String m= "))

str=input("Input String:")

n=int(input("Number of characters to rotate:"))

final=""

if " " in str:

print("no whitespace plz")

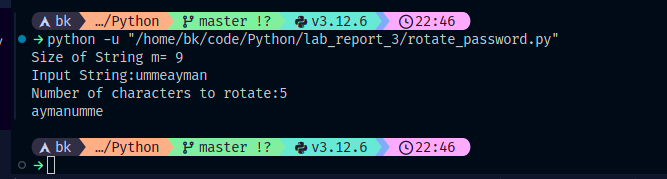
else:

first\_part=str[:n-1]

second\_part=str[n-1:]

final=second\_part+first\_part

print(final)



15. Employee system

name\_list=["Umme","Eity","Esrat"]

dict={}

asc\_list=[]

for i in range(len(name\_list)):

sum=0

for j in range(len(name\_list[i])):

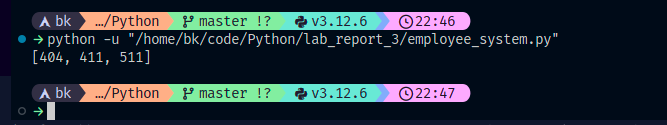
asc\_value=ord(name\_list[i][j])

sum=sum+asc\_value

dict[name\_list[i]]=sum

asc\_list.append(sum)

print(asc\_list)



16. Password maker

*def* pass\_maker(*str*):

if len(*str*)!=10:

print("expected password of 10 length")

return

upper\_str=*str*[:3].upper()

lower\_str=*str*[-3:].lower()

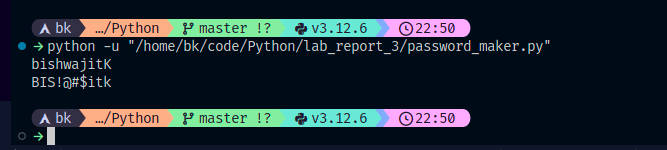
special\_str="!@#$"

return upper\_str+special\_str+lower\_str

str=input()

new\_pass = pass\_maker(str)

print(new\_pass)



17. Sum of even

x=[3,4,5,7,8,10,'dghf','cbxgc',3.5, 6.2]

sum=0

for i in range(len(x)):

if type(x[i]) == int and x[i]%2==0:

sum=sum+x[i]

print(sum)

