Task1: Palindrome

In [1]:

```
def palindrome():
    string=input("Enter the string = ")
    reverse=string[::-1]
    if (reverse==string):
        return "Yes palindrome"
    else:
        "Not a palindrome"


palindrome()
```

```
Enter the string = MalayalaM
```

Out[1]:

```
'Yes palindrome'
```

Task2: To sort a string

In [2]:

```
def sorting():
    string=input("enter the string u want to sort = ")
    lists=sorted(string)
    for item in lists:
        print(item,end="")
sorting()
```

```
enter the string u want to sort = twitter
eirtttw
```

Task3: To convert list of characters into string

In [3]:

```
def list_into_string():
    lt=[]
    for i in range(15):
        lt.append(input("Enter character -> "))

    for item in lt:
        print(item,end="")

list_into_string()
```

```
Enter character -> P
Enter character -> R
Enter character -> A
Enter character -> V
Enter character -> E
Enter character -> E
Enter character -> N
Enter character ->
Enter character -> K
Enter character -> U
Enter character -> M
Enter character -> A
Enter character -> R
Enter character ->
Enter character -> S
PRAVEEN KUMAR S
```

Task4: To find min and max of list

In [4]:

```
def min_max(lists):
    min1=min(lists)
    max1=max(lists)
    print("Minimum-> {0}, Maximum -> {1}".format(min1,max1))

mlist=range(1,25,3)
min_max(mlist)
```

```
Minimum-> 1, Maximum -> 22
```

Task5: Dictionary to find min and max

In [5]:

```
items={}
while(True):
    key=input("Enter key = ")
    if(key=="STOP"):
        break
    val=input("Enter val = ")
    items[key]=val
def min_max_dict(dict):
    minimum=min(dict.values())
    maximum=max(dict.values())
    return minimum,maximum
min_max_dict(items)
```

```
Enter key = item1
Enter val = 45.5
Enter key = item2
Enter val = 35
Enter key = item3
Enter val = 41.3
Enter key = item3
Enter val = 29
Enter key = item5
Enter val = 49.89
Enter key = STOP
```

Out[5]:

```
('29', '49.89')
```

Task6: Profile card

In [6]:

```
def profile():
    Name=input("Enter your name = ")
    Age=int(input("Enter your age = "))
    Gender=input("Enter your gender = ")
    print()
    return Name,Age,Gender

def get_info():
    Name,Age,Gender=profile()
    print("   Profile card  ")
    print()
    print("Name   : ",Name)
    print("Age    : ",Age)
    print("Gender : ",Gender)

get_info()
```

```
Enter your name = PRAVEEN KUMAR
Enter your age = 22
Enter your gender = Male

   Profile card

Name   :  PRAVEEN KUMAR
Age    :  22
Gender :  Male
```

Task7: Nested function

In [7]:

```
def inner_func():
    a=int(input("Enter value of A= "))
    b=int(input("Enter value of B= "))
    return a**2*b
def outer_func():
    out=inner_func()
    return out
outer_func()
```

```
Enter value of A= 12
Enter value of B= 12
```

Out[7]:

```
1728
```

Task8: Sorting color tuples

In [8]:

```
color_tup=[("black",4),("green",1),("red",5),("blue",3),("yellow",2)]
def sorter(lists):
    lists.sort(key= lambda x:x[1])
    return lists
print(sorter(color_tup))
```

```
[('green', 1), ('yellow', 2), ('blue', 3), ('black', 4), ('red', 5)]
```

Task9: To find intersection of 2 lists

In [9]:

```
list1=["Andy","Mandy","Sandy"]
list2=["Handy","Brandy","Mandy"]
intersection=list(filter(lambda x:x in list1,list2))
print(intersection)
```

```
['Mandy']
```

Task10: To use map function with lambda

In [10]:

```
mat1=[12,13,14]
mat2=[17,16,15]
matres=list(map(lambda x,y:x+y,mat1,mat2))
print(matres)
```

```
[29, 29, 29]
```