# programs  
from python\_programs import factiorial  
  
**# 1.check the number is even or odd**  
  
num=int(input("Enter any number: "))  
  
if num%2 == 0:  
 print(f"The number {num} is even")  
else:  
 print(f"the number {num} is odd")  
  
  
**# 2. largest number**  
a=int(input("Enter number a: "))  
b=int(input("Enter number b: "))  
c=int(input("Enter number c: "))  
  
print("the maximum number is : ",max(a,b,c))  
  
**# 3. factorial of a number**  
  
val=int(input("Enter any number: "))  
  
def fact\_val(n):  
 if n== 0:  
 return 1  
 else:  
 return n\*fact\_val(n-1)  
result=fact\_val(val)  
print(f" given number is: {val} \n The factorial number is : {result}")  
  
**# 4. fibonacci number**  
  
n=int(input("Enter any number: "))  
  
a=0  
b=1  
  
for i in range(n):  
 print(a,end=" ")  
 a,b=b,a+b  
  
  
**# 5. check prime number**  
n=int(input("Enter any number: "))  
  
def prime\_check(n):  
 if n>1:  
 for i in range(2,int(n\*0.5)+1):  
 if n%i == 0:  
 print(f" {n} not a prime number")  
 break  
 else:  
 print(f"prime number is: {n} ")  
 else:  
 print(f" {n} not a prime number")  
  
prime\_check(n)  
  
**# 6. reverse string**  
n=input("Enter any string here: ")  
  
print("the reverse string is: ",n[::-1])  
  
str=input("Enter string name here: ")  
  
add=""  
for i in range(len(str)):  
  
 add=str[i]+add  
  
print(add)  
  
  
**# 7. palindrome check**  
n=input("Enter any number here: ")  
  
def palindrome\_check(n):  
 if n == n[::-1]:  
 print(f"{n} is palindrome")  
 else:  
 print(f"{n} is not palindrome")  
palindrome\_check(n)  
  
  
**# 8. swap two numbers**  
n=int(input("Enter number a: "))  
m=int(input("Enter number b: "))  
  
n,m=m,n  
  
print(f"the swap numbers are a= {n} b= {m}")  
  
**# 9. smallest number**  
a=int(input("Enter any number: "))  
b=int(input("Enter any number: "))  
c=int(input("Enter any number: "))  
  
print("the smallest number is: ",min(a,b,c))  
  
  
**# 10. sort number**  
list\_items=[535,2,636,24,77,4,63,555,22,35,99]  
  
sorted\_items=sorted(list\_items) # sort also used  
  
print(sorted\_items)  
  
**# 11. sum of numbers**  
sum\_num=[55,35,23,77,46,88,53,24,20,14]  
  
sum=0  
for i in range(len(sum\_num)):  
  
 sum+=sum\_num[i]  
  
print("total",sum)  
  
  
sum\_num=[553,53,22,4,23,10]  
  
result=sum(sum\_num)  
  
print(result)  
  
**# 12. count the repeated numbers**  
  
  
count\_values=[4,66,7,44,33,55,4,79,4,6,98,64,4,775,4,66,4]  
  
val\_items=count\_values.count(4)  
  
print("the number of repeated items are ",val\_items)  
  
  
**# 13. simple star pyramids**  
  
num=int(input("Enter the value: "))  
def star\_pyramid(n):  
 for i in range(1,n+1):  
 print(" "\*(n-i)+"\*"\*(2\*i-1))  
  
star\_pyramid(num)  
  
**# 14. left-angle triangle**  
  
  
num=int(input("Enter the value: "))  
  
def left\_pyramid(n):  
 for i in range(1,n+1):  
 print("\*"\*i)  
  
left\_pyramid(num)  
  
**# 15. right-aligned**  
  
num=int(input("Enter the number : "))  
  
def right\_pyramid(n):  
 for i in range(1,n+1):  
 print(" "\*(n-i)+"\*"\*(i-1))  
  
right\_pyramid(num)  
  
**# 16.number triangle**  
  
num=int(input("Enter any number: "))  
  
def number\_triangle(n):  
 for i in range(1,n+1):  
 for j in range(1,i+1):  
 print(j,end=" ")  
  
 print()  
  
number\_triangle(num)  
  
**# 17. percentage**  
  
sub\_marks=[80,56,36,80,95,60]  
  
total\_marks=500  
  
def find\_percentage(marks,total):  
  
 return (sum(marks)/total)\*100  
  
percentage=find\_percentage(sub\_marks,total\_marks)  
  
print(f"the total percentage is: {percentage:.2f}%")  
  
**# 18.find a string**  
  
main\_str="Hello santosh welcome to python world!"  
  
sub\_str="python"  
  
def find\_str(main\_str,sub\_str):  
 if sub\_str in main\_str:  
 return main\_str.index(sub\_str)  
 else:  
 return -1  
  
idx\_position=find\_str(main\_str,sub\_str)  
  
if idx\_position != -1:  
 print(f"the string is {sub\_str} and the position is {idx\_position}")  
else:  
 print(f"the string is {sub\_str} not found.")  
  
**# 19. capitalize the first letter of each string**  
str=input("Enter any string name: ")  
  
def str\_capitalize(n):  
  
 first\_capital=n.title()  
  
 return first\_capital  
  
result=str\_capitalize(str)  
  
print("the first letter is capital",result)  
  
**# 20. concatenate the strings**  
  
list\_str=["santosh","peddinti","python"]  
  
def con\_str(n):  
  
 return ' - '.join(n)  
  
result=con\_str(list\_str)  
  
print("the concatenate the list is: ",result)