**Answer 1 –** C) % (Modulo operator)

**Answer 2-** B) 0

**Answer 3 –** C) 24

**Answer 4 –** A) 2

**Answer 5 –** D) 6

**Answer 6 –** C)

**Answer 7 –** A)

**Answer 8 –** C)

**Answer 9 –** A) and C)

**Answer 10 –** A) and B)

**Answer 11 -**   
a = int(input("Enter an Integer: "))

factorial = 1

for i in range(1,a + 1):

factorial = factorial\*i

print("The factorial of",a,"is",factorial)

**Answer 12 -**

if num > 1:

for i in range(2,num):

if (num % i) == 0:

print(num,"is not a prime number")

print(i,"times",num//i,"is",num)

break

else:

print(num,"is a prime number")

else:

print(num,"is not a prime number")

**Answer 13 -**   
string = "kanak"

rev\_string = reversed(string)

if list(string) == list(rev\_string):

print("The string is a palindrome.")

else:

print("The string is not a palindrome.")

**Answer 14 -**   
def pytho(b,p,h):

if p == str('x'):

return ("perpendicular =", str(((h\*\*2) - (b\*\*2))\*\*0.5))

elif b == str('x'):

return ("base =", str(((h\*\*2) - (p\*\*2))\*\*0.5))

elif h == str('x'):

return ("hypoth = ", str(((b\*\*2) + (p\*\*2))\*\*0.5))

print(pytho(3,4,'x'))

**Answer 15 -**   
test\_str = "This is sparta"

all\_freq = {}

for i in test\_str:

    if i in all\_freq:

        all\_freq[i] += 1

    else:

        all\_freq[i] = 1