Good afternoon students .
XIIB Computer Science :

Teacher : BIPLAB DAS
Study materials for (23rd May 2020) .
Now we will start the Review questions of 3rd chapter of Reeta Sahoo .

Go through the pages 128 to 130
Review questions from (17 to 37) .

The homework will be uploaded by 8pm tomorrow (26th May) .

Thanks .

4:09 pm ✓

```
def main():
    i, j = 4, 10
    square(i, j)
    print (i, "\t", j)
main()
```

14. Find the error, if any, in the following programs:

(*a*)
```
def sum(i, j):
return (i*j)
def main():
    k = sum(i, j)
print (k)
main()
```

(*b*)
```
def div(a, b):
    a = a + b
    b = b + b
    return(a, b)
def main():
    c = div(a, b)
    print (c)
main()
```

15. Give the output of the following program:
```
def sumfn(last):
    sum = j = sum2= 0
    for j in range(last, j, –1):
        sum += j
        sum2 += sum;
    print (sum, "  ", sum2)
def main():
    for i in range(1, 11):
        sumfn(i)
main()
```

16. Give the output of the following program:
```
def area(s, a):
    return(s * s)
def area(b, h=5):
    return(0.5 * b * h)
def main():
    print (area(5, 1))
    print (area(4, 3))
    print (area(6, (area(3,1))))
main()
```

17. Observe the following Python code very carefully and rewrite it after removing all syntactical errors with each correction underlined.
```
DEF execmain():
    x = int(input("Enter a number:"))
```

```
if (abs(x) = x):
    print ("You entered a positive number")
else:
    x=*–1
    print ("You made positive:" x)
execmain()
```

18. Write a program to calculate the roots of quadratic equation using a function.
19. Write a function which accepts two parameters A and B and interchanges their values.
20. Any year is entered through the keyboard. Write a function to determine whether the year entered is leap year or not.
21. Write a menu driven program using function to do the following tasks:
    (*a*) to check whether the number is even or odd.
    (*b*) to find the sum of even numbers.
    (*c*) to find the sum of odd numbers.
    (*d*) to exit
22. Write a function to find the sum of the series:
    $1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 +$ ..... up to N terms.
23. Write a Menu driven program to calculate:
    1. Area of a rectangle.
    2. Area of a circle.
    3. Area of a cube.
24. Write a function to find the product of first 20 natural numbers.
25. Write a function to find the sum of series:
    (2) + (2 + 4) + (2 + 4 + 6) + (2 + 4 + 6 + 8) ..... up to N terms.
26. Write a function to find the sum of the series:
    $1 + \frac{1}{3} + \frac{1}{5} + \frac{1}{7} + \frac{1}{9} + \ldots + \frac{1}{N}$.
27. Write a function to find the sum of the series:
    $1^2 + 3^2 + 5^2 + 7^2 + 9^2 +$ ..... up to N terms.
28. Write a function to find the sum of the series:
    (1) + (1 + 3) + (1 + 3 + 5) + (1 + 3 + 5 + 7) ..... up to N terms.
29. Write a function to find the sum of the series:
    $1 + x^2 + x^3 +$ ... up to N terms.
30. Write a function to find the sum of the series:
    $\frac{1}{1^2} + \frac{1}{3^2} + \frac{1}{5^2} + \frac{1}{7^2} + \ldots + \frac{1}{N^2}$.
31. Write a function to find the sum of the series:
    $\frac{1}{2^2} + \frac{1}{4^2} + \frac{1}{6^2} + \frac{1}{8^2} + \ldots + \frac{1}{N^2}$.
32. Write a function to find the sum of the series:
    $\frac{1}{1^2} + \frac{1}{2^2} + \frac{1}{3^2} + \frac{1}{4^2} + \frac{1}{5^2} + \ldots + \frac{1}{N^2}$.
33. Write a function to find the sum of the series:
    $1 + \frac{1}{2!} + \frac{1}{3!} + \frac{1}{4!} + \frac{1}{5!} + \ldots + \frac{1}{N!}$.