

Assignment No.1

Q1.

#Ex.1-WAP to calculate the percentage of students based on marks of any 5 subjects.

```
m1=int(input("Enter subject 1 marks:"))
m2=int(input("Enter subject 2 marks:"))
m3=int(input("Enter subject 3 marks:"))
m4=int(input("Enter subject 4 marks:"))
m5=int(input("Enter subject 5 marks:"))
total_marks=m1+m2+m3+m4+m5
print(f'Students total marks:{total_marks}')
percentage=(total_marks/500)*100
print(f'Percentage of student is {percentage}%')
```

Q2.

#WAP to calculate area of rectangle based on length and breadth

```
length=int(input("Enter length of rectangle:"))
breadth=int(input("Enter breadth of rectangle:"))
area_of_rectangle=length*breadth
print(f'Area of reactangle is:{area_of_rectangle}')
```

Q3.

#program to find quotient and remainder of two numbers

```
num1=int(input("Enter value of num1:"))
num2=int(input("Enter value of num2:"))
quotient=num1/num2
remainder=num1%num2
print(f'Quotient is:{quotient} & Remainder is:{remainder}')
```

Q4.

#WAP to enter P,T,R and calculate simple interest

```
p=int(input("Enter value of principle:"))
t=int(input("Enter value of time:"))
r=int(input("Enter value of rate:"))
simple_interest=(p*r*t/100)
print(f'Simple interest is:{simple_interest}')
```

Q5.

#WAP to enter P,R,T and calculate compound interest

```
p=int(input("Enter value of principle:"))
t=int(input("Enter value of time:"))
r=int(input("Enter value of rate:"))
compound_interest=p*(1+r/100)**t-p
print(f'Compound interest is:{compound_interest}')
```

Q6.

#find volume of sphere

```
pi=float(input("Enter value of pi:"))
r=int(input("Enter value of r:"))
volume_of_sphere=4/3*pi*r**3
print(f'Volume of sphere is:{volume_of_sphere}')
```

Q7.

#find area and circumference of circle

```
pi=float(input("Enter value of pi:"))
r=int(input("Enter value of r:"))
area_of_circle=pi*r**2
circumference_of_circle=2*pi*r
print(f'Area of circle:{area_of_circle}')
print(f'Circumference of circle:{circumference_of_circle}')
```

Q8.

#WAP to calculate area of a equilateral traingle

```
a=int(input("Enter area of a equilateral triangle:"))
```

```
area_of_equilateral_triangle=(3**0.5/4)*a**2
```

```
print(f'Area of equilateral triangle is:{area_of_equilateral_triangle}')
```

Q9.

#program to find roots of quadratic equation

```
a=int(input("Enter value of a:"))#1
```

```
b=int(input("Enter value of b:"))#-3
```

```
c=int(input("Enter value of c:"))#2
```

```
x1=(-b+(((b**2)-4*(a)*(c))**0.5)/(2*a))
```

```
x2=(-b-(((b**2)-4*(a)*(c))**0.5)/(2*a))
```

```
print(f'Both values of roots:{x1} & {x2}')
```

Q10.

#WAP to convert days into years,weeks and days

```
day=int(input("Enter value of days:"))
```

```
year=day//365
```

```
print(year)
```

```
rem_day=day%365
```

```
print(rem_day)
```

```
week=rem_day//7
```

```
print(week)
```

```
print(f'Year:{year},Week:{week},Day:{day}')
```

Q11.

#WAP to input two angles from user and find third angle of triangle

```
a1=int(input("Enter value of angle a1:"))
```

```
a2=int(input("Enter value of angle a2:"))
```

```
a3=180-(a1+a2)
```

```
print(f'Third angle of triangle is:{a3}')
```

Q12.

#WAP to enter base and height of a triangle and find its area

```
b=int(input("Enter base of triangle:"))
```

```
h=int(input("Enter height of triangle:"))
```

```
area=(b*h)/2
```

```
print(f'Area of triangle is:{area}')
```