Q1

**package** assignment\_1;

**import** java.util.Scanner;

**public** **class** armstrong {

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner (System.***in***);

**int** n;

**int** temp;

**int** r;

**int** sum=0;

System.***out***.println("Enter the number to be verified:");

n=sc.nextInt();

temp=n;

**while**(n>0)

{

r=n%10;

n=n/10;

sum = sum+ r\*r\*r;

}

**if**(sum==temp)

System.***out***.println("It is armstrong no");

**else**

System.***out***.println("It is not armstrong no");

}

}

Q2

**package** assignment\_1;

**public** **class** range {

**public** **static** **void** main (String [] args) {

**for** (**int** num = 100 ; num <= 999 ; num ++)

{

**int** n = num;

**int** d = 0;

**int** s = 0;

**while** (n > 0)

{

d = n % 10;

s = s + (d \* d \* d);

n = n / 10;

}

**if** (num == s)

{

System.***out***.println (num + "is Armstrong number");

}

}

}

}

Q3

**package** assignment\_1;

**import** java.util.Scanner;

**public** **class** interest {

**public** **static** **void** main (String [] args) {

{

**double** pr, rate, t, sim,com;

Scanner sc=**new** Scanner (System. ***in***);

System.***out***.println("Enter the amount:");

pr=sc.nextDouble();

System. ***out***. println("Enter the No.of years:");

t=sc.nextDouble();

System. ***out***. println("Enter the Rate of interest");

rate=sc.nextDouble();

sim=(pr \* t \* rate)/100;

com=pr \* Math.*pow*(1.0+rate/100.0,t) - pr;

System.***out***.println("Simple Interest="+sim);

System.***out***. println("Compound Interest="+com);

}

}

}

Q4

**package** assignment\_1;

**import** java.util.Scanner;

**public** **class** Condition {

**public** **static** **void** main (String [] args) {

**int** [] sub=**new** **int**[3];

**int** count = 0;

Scanner sc=**new** Scanner (System. ***in***);

System.***out***.println("Enter the marks of three subject:");

**for**(**int** i=0;i<3;i++)

{

sub[i]=sc.nextInt();

}

**for**(**int** i=0;i<3;i++)

{

**if**(sub[i]>=60)

{count++;}

}

**if**(count==3)

{

System.***out***.println("Passed");

}

**else** **if** (count==2)

{

System.***out***.println("Promoted");

}

**else**

{

System.***out***.println("Failed");

}

}

}

Q5

**package** assignment\_1;

**import** java.util.\*;

**public** **class** Incometax {

**public** **static** **void** main(String[] args) {

**double** tax=0;

**double** CTC;

Scanner sc= **new** Scanner(System.***in***);

System.***out***.println("Enter your CTC:");

CTC=sc.nextDouble();

**if**(CTC>0 && CTC<=180000)

{

tax=0;

}

**else** **if**(CTC>180001 && CTC<=300000)

{

tax=0.1\*CTC;

}

**else** **if** (CTC>300001 && CTC<=500000)

{

tax=0.2\*CTC;

}

**else** **if** (CTC>500000 && CTC<=1000000)

{

tax=0.3\*CTC;

}

System.***out***.print("Your Income tax is:" +tax);

}

}

Q6

**package** assignment\_1;

**import** java.util.Scanner;

**public** **class** Username {

**public** **static** **void** main(String[]args) {

**int** attempt=0;

String userid,password;

**while** (attempt<3) {

Scanner sc= **new** Scanner(System.***in***);

System.***out***.println("Enter your user ID:");

userid=sc.nextLine();

System.***out***.println("Enter your password:");

password=sc.nextLine();

**if**(userid.equals("MAC") && password.equals("MAC123"))

{

System.***out***.println("Welcome");

System.*exit*(0);

}

**else**

{

attempt++;

}

**if** (attempt>=3)

{

System.***out***.println("Contact Admin");

}

}

}

}

Q7

**package** assignment\_1;

**import** java.util.Scanner;

**public** **class** Array {

**public** **static** **void** main(String[] args)

{

**int** i ,flag=0;

**int** a[] = {5,8,15,45,65,36,95,78,49,17,77,12,57,93,91};

Scanner s = **new** Scanner(System.***in***);

System.***out***.print("Enter the number you want to find:");

**int** number=s.nextInt();

**for**(i = 0; i < 15; i++) {

**if** ( a[i] == number)

{

flag = 1;

**break**;

}

**else**

{

flag = 0;

}

}

**if**(flag == 1)

{

System.***out***.println("Element found at position:"+i);

}

**else**

{

System.***out***.println("Element not found");

}

}

}

Q8

**package** assignment\_1;

**import** java.util.Scanner;

**public** **class** Bubblesort {

**public** **static** **void** main(String[] args)

{

**int** i,j ,flag=0;

**int** a[] = {5,8,15,45,65,36,95,78,49,17,77,12,57,93,91};

System.***out***.print("The numbers you entered\n");

**for**(i = 0; i < 15; i++)

{

System.***out***.print(a[i]+ ",");

}

System.***out***.print("\nThe numbers after sorting\n");

**for**(i = 0; i < 15; i++)

{

**for**(j = i+1; j< 15; j++)

{

**if** ( a[i]>a[j])

{**int** temp=a[i];

a[i]= a[j];

a[j]=temp;

}

}

{

**for**(i = 0; i < 15; i++)

{

System.***out***.print(a[i]+ ",");

}

}

}

}

}

Q9

**public** **class** Avg {

**public** **static** **void** main(String[] args)

{

**int** i;

**float** total=0;

**float** Avg=0;

**float** A[]=**new** **float**[3];

**float** B[]=**new** **float**[3];

**float** C[]=**new** **float**[3];

System.***out***.println("Enter the marks of three subject of all three students:");

Scanner sc=**new** Scanner (System. ***in***);

**for**(i=0;i<3;i++)

{

A[i]=sc.nextFloat();

}

**for**(i=0;i<3;i++)

{

B[i]=sc.nextFloat();

}

**for**(i=0;i<3;i++)

{

C[i]=sc.nextFloat();

}

**for**(i=0;i<3;i++)

{

total=0;

total=A[i]+B[i]+C[i];

Avg=(total/3);

System.***out***.println("Total :" +total +" "+"Avg :"+Avg);

}

}

}