```
import java.util.Scanner;

class Ca2_1
{
public static void main(String args[])
{

int i=1; //counter
int temp; //temp value

Scanner scan=new Scanner(System.in);

System.out.println("Enter upper range for series: ");
int upl = scan.nextInt();

while(i<=upl)
{
temp=(int)Math.pow(i,2);
i++;

if(temp>upl)
{break;} //if range exceeded break out of loop

if((temp%3==0)||(temp%7==0))
{ continue;} //if divisable by 3 or 7 skip iteration
else
{
System.out.print(temp + ", ");
}
}//end while

System.out.println("\n\nThis series contains power of consecetive number up to the given range: " +
upl);
System.out.println("It skips any number divisable by 3 or 7");

}//end of main
}//end of class
```

```
C:\Users\banuk\OneDrive\LPU2020 2.2\CAP904 Java\#S2.1 Practicals>java Ca2_1
Enter upper range for series:
300
1, 4, 16, 25, 64, 100, 121, 169, 256, 289,

This series contains power of consecetive number up to the given range: 300
It skips any number divisable by 3 or 7

C:\Users\banuk\OneDrive\LPU2020 2.2\CAP904 Java\#S2.1 Practicals>
```

```
import java.util.Scanner;

class Books
```

```
{
String book_name;
String book_author;
int no_of_pages;
int cost;

Books()
{
book_name = "Book name not set";
book_author = "Author not set";
no_of_pages = 0;
cost = 0;
}

Books(String bn, String ba, int bp, int bc)
{
//initialize data members using a parameterized
book_name = bn;
book_author = ba;
no_of_pages = bp;
cost = bc;
}

void print_details()
{
System.out.println("Book Name: " + book_name
+"\nBook Author: " + book_author
+"\nPages in book: " + no_of_pages
+"\nCost of Book: " + cost);
} //end of print function

void set_book(String bn, String ba, int bp, int bc)
{
//initialize data members using a method(member function)
book_name = bn;
book_author = ba;
no_of_pages = bp;
cost = bc;
}


}//end of class books


class Ca2_2
{
public static void main(String args[])
{
Scanner scan=new Scanner(System.in);

System.out.println("Enter name for book1: ");
```

```
String bn = scan.nextLine();
System.out.println("Enter author for book1: ");
String ba = scan.nextLine();
System.out.println("Enter pages for book1: ");
int bp = scan.nextInt();
System.out.println("Enter cost for book1: ");
int bc = scan.nextInt();

System.out.println("\n\nInitialized using a method AKA member function");
System.out.println("\nFiction book");
Books fiction = new Books();
fiction.set_book(bn,ba,bp,bc);
fiction.print_details();

System.out.println("\nInitialized using a object of class");
System.out.println("\nNon-Fiction book");
Books non_fiction = new Books();
non_fiction.book_name = "Harry Potter";
non_fiction.book_author = "JK Rolling";
non_fiction.no_of_pages = 342;
non_fiction.cost = 111;
non_fiction.print_details();

System.out.println("\n\nInitialized using a non-parameter constructor with default values");
Books book3 = new Books();
book3.print_details();

System.out.println("\n\nInitialized using a parameterized constructor with given values");
Books book4 = new Books("Sherlock", "Conondile", 232, 422);
book4.print_details();


}//end of main
}//end of class CA2_2
```

```
C:\Users\banuk\OneDrive\LPU2020 2.2\CAP904 Java\#S2.1 Practicals>javac Ca2_2.java

C:\Users\banuk\OneDrive\LPU2020 2.2\CAP904 Java\#S2.1 Practicals>java Ca2_2
Enter name for book1:
Aladin
Enter author for book1:
Joseph M
Enter pages for book1:
232
Enter cost for book1:
121


Initialized using a method AKA member function

Fiction book
Book Name: Aladin
Book Author: Joseph M
Pages in book: 232
Cost of Book: 121

Initialized using a object of class

Non-Fiction book
Book Name: Harry Potter
Book Author: JK Rolling
Pages in book: 342
Cost of Book: 111


Initialized using a non-parameter constructor with default values
Book Name: Book name not set
Book Author: Author not set
Pages in book: 0
Cost of Book: 0

Initialized using a non-parameter constructor with default values
Book Name: Book name not set
Book Author: Author not set
Pages in book: 0
Cost of Book: 0


Initialized using a parameterized constructor with given values
Book Name: Sherlock
Book Author: Conondile
Pages in book: 232
Cost of Book: 422

C:\Users\banuk\OneDrive\LPU2020 2.2\CAP904 Java\#S2.1 Practicals>
```