Main.java

```java
import java.util.Scanner;
class Player
{
    String id;
    String name;
    int [] scores;
    int no_matches_played;
    int i;
    int sum;
    double avg;

    void details()
    {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter player's id: ");
        id = scan.nextLine();
        System.out.println("Enter player's name: ");
        name = scan.nextLine();
        System.out.println("Enter the number of matches played: ");
        no_matches_played = scan.nextInt();
        scores = new int[no_matches_played];
        for(i=0; i<no_matches_played; i++)
        {
            System.out.println("Enter score of " + (i+1) + " match: ");
            scores [i] = scan.nextInt();
            sum = sum + scores[i];
        }
    }

    double average()
    {
        avg = sum/no_matches_played;

        return avg;
    }
```

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```
    }

    void display()
    {
        System.out.println("Details of player with greater average score:");
        System.out.println("Player's id: " + id);
        System.out.println("Player's name: " + name);
        System.out.println("Number of matches played: " + no_matches_played);
        System.out.println("Player's average score: " + avg);
        System.out.println(" ");
    }
}

public class Main
{
    public static void main(String[] args) {
        double x, y;
        Player p1 = new Player();
        System.out.println("Enter the details of the player 1:");
        p1.details();
        x = p1.average();
        System.out.println(" ");

        Player p2 = new Player();
        System.out.println("Enter the details of the player 2:");
        p2.details();
        y = p2.average();

        System.out.println(" ");
        if(x > y)
        p1.display();
        else
        p2.display();

    }
}
```

```
Enter player's id:
A1
Enter player's name:
aakanksha
Enter the number of matches played:
3
Enter score of 1 match:
56
Enter score of 2 match:
78
Enter score of 3 match:
90

Enter the details of the player 2:
Enter player's id:
A2
Enter player's name:
bhavya
Enter the number of matches played:
3
Enter score of 1 match:
67
Enter score of 2 match:
78
Enter score of 3 match:
89

Details of player with greater average score:
Player's id: A2
Player's name: bhavya
Number of matches played: 3
Player's average score: 78.0



...Program finished with exit code 0
Press ENTER to exit console.
```

Main.java

```java
import java.util.Scanner;
class Book
{
    private String bookid;
    public String booktitle;
    private int no_of_pages;
    public int year_of_pub;
    public String author;
    private String publisher;
    private int price;

    void accept()
    {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter book id: ");
        bookid = scan.nextLine();
        System.out.println("Enter book title: ");
        booktitle = scan.nextLine();
        System.out.println("Enter no of pages of book: ");
        no_of_pages = scan.nextInt();
        System.out.println("Enter the year of publication: ");
        year_of_pub = scan.nextInt();
        System.out.println("Enter author's name: ");
        author = scan.next();
        System.out.println("Enter publisher's name : ");
        publisher = scan.next();
        System.out.println("Enter book's price': ");
        price = scan.nextInt();
        System.out.println(" ");
    }

    void display()
    {
       System.out.println("Book id: " + bookid);
       System.out.println("Book title: "+ booktitle);
```

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```
36          System.out.println("No of pages of book: " + no_of_pages);
37          System.out.println("Enter the year of publication: "+ year_of_pub);
38          System.out.println("Author's name: "+ author);
39          System.out.println("Publisher's name : "+ publisher);
40          System.out.println("Book's price': "+ price);
41          System.out.println(" ");
42      }
43
44      String author_book()
45      {
46          return author;
47      }
48
49      float expensive_title()
50      {
51          return price;
52      }
53
54      int pages_book()
55      {
56          return no_of_pages;
57      }
58  }
59
60  public class Main
61  {
62      public static void main(String[] args) {
63          Book b1 = new Book();
64          b1.accept();
65          Book b2 = new Book();
66          b2.accept();
67          Book b3 = new Book();
68          b3.accept();
69
70      Scanner scan = new Scanner(System.in);
```

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```
72      System.out.println("Enter author name: ");
73      String x = scan.nextLine();
74      if(x==b1.author_book())
75          {b1.display();}
76      if(x==b2.author_book())
77          {b2.display();}
78      if(x==b3.author_book())
79          {b3.display();}
80
81      if((b1.expensive_title()>b2.expensive_title()) && (b1.expensive_title()>b3.expensive_title()))
82          System.out.print("Most expensive book: "+ b1.booktitle);
83      if((b2.expensive_title()>b1.expensive_title()) && (b2.expensive_title()>b3.expensive_title()))
84          System.out.print("Most expensive book: "+ b2.booktitle);
85      if((b3.expensive_title()>b1.expensive_title()) && (b3.expensive_title()>b2.expensive_title()))
86          System.out.println("Most expensive book: "+ b3.booktitle);
87      System.out.println(" ");
88      int count=0;
89      if((b1.year_of_pub ==2020) && (b1.expensive_title()>b3.expensive_title()))
90          count++;
91      if((b2.year_of_pub ==2020) && (b1.expensive_title()>b3.expensive_title()))
92          count++;
93      if((b3.year_of_pub ==2020) && (b1.expensive_title()>b3.expensive_title()))
94          count++;
95      System.out.println("Number of books published in 2020 are: "+ count);
96
97      System.out.println(" ");
98      System.out.println("Details of book with least no of pages: ");
99
100     if((b1.pages_book()<b2.pages_book()) && (b1.pages_book()<b3.pages_book()))
101         b1.display();
102     if((b2.pages_book()<b1.pages_book()) && (b2.pages_book()<b3.pages_book()))
103         b2.display();
104     if((b3.pages_book()<b1.pages_book()) && (b3.pages_book()<b1.pages_book()))
105         b3.display();
106     }
107 }
```

```
Enter book id:
ty56
Enter book title:
OOJ
Enter no of pages of book:
89
Enter the year of publication:
2020
Enter author's name:
Aut1
Enter publisher's name :
Pub1
Enter book's price':
890

Enter book id:
gh90
Enter book title:
SDM
Enter no of pages of book:
98
Enter the year of publication:
2019
Enter author's name:
Aut2
Enter publisher's name :
Pub2
Enter book's price':
9800

Enter book id:
bd12
Enter book title:
LD
Enter no of pages of book:
80
Enter the year of publication:
```

```
Enter no of pages of book:
80
Enter the year of publication:
2020
Enter author's name:
Aut3
Enter publisher's name :
Pub3
Enter book's price':
800

Search by author name-
Enter author name:
Aut1
Book id: ty56
Book title: OOJ
No of pages of book: 89
Enter the year of publication: 2020
Author's name: Aut1
Publisher's name : Pub1
Book's price': 890

Most expensive book: SDM
Number of books published in 2020 are: 2

Details of book with least no of pages:
Book id: bd12
Book title: LD
No of pages of book: 80
Enter the year of publication: 2020
Author's name: Aut3
Publisher's name : Pub3
Book's price': 800



...Program finished with exit code 0
```