**Homework2: Loop**

Find the factorial number of 5.



Answer:

**public** **class** Answer1 {

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

**int** factorial = 1;

**for**(**int** i = 1; i <= 5; i++) {

factorial \*= i;

}

System.***out***.println(factorial);

}

}

Using while loop to calculate the sum of all even number from 1 to 50.



Answer:

**int** i = 1;

**int** sum = 0;

**while**(i <= 50) {

**if**(i % 2 == 0) {

sum += i;

}

i++;

}

System.***out***.println(sum);

Using do while loop to calculate the average of all odd number from 1 to 50.



Answer:

**public** **class** Answer1 {

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

**int** i = 1;

**int** average =0;

**int** sum = 0;

**do** {

**if**(i % 2 != 0) {

sum += i;

}

i++;

}**while**(i <= 50);

average = sum / i;

System.***out***.println(average);

}

}

Using switch to solve the problem as below.

Let the user input any letter from keyboard and check

* Letter ‘a’ or ‘A’ display “You order BayChha.”
* Letter ‘b’ or ‘B’ display “You order Ice Tea.”
* Letter ‘c’ or ‘C’ display “You order Soup.”
* Other letter beside these display “Out of order…”

Answer:

**import** java.util.Scanner;

**public** **class** Answer1 {

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

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

System.***out***.print("Enter name:");

//char letter = sc.next().charAt(0);

String letter = sc.nextLine();

**switch**(letter) {

**case** "a":

**case** "A":

System.***out***.println("You order BayChha.");

**break**;

**case** "b":

**case** "B":

System.***out***.println("You order Ice Tea.");

**break**;

**case** "c":

**case** "C":

System.***out***.println("You order Soup.");

**break**;

**default**:

System.***out***.println("Out of order");

}

}

}

Write Java Program to make pagination logic to display entities (rows or records of data) into datatable with select option to choose how many entities to show on each page which will be input from keyboard with the option as below:

* + - A or a: entities per page is 10
    - B or b: entities per page is 20
    - C or c: entities per page is 50
    - D or d: entities per page is 100
    - E or e: entities per page is 200
    - Default value of entities per page is 5

Answer:

**package** test;

**import** java.util.Scanner;

**public** **class** Test {

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

System.***out***.println("Enter A or a to display 10 entities per page");

System.***out***.println("Enter B or b to display 20 entities per page");

System.***out***.println("Enter C or c to display 50 entities per page");

System.***out***.println("Enter D or d to display 100 entities per page");

System.***out***.println("Enter E or e to display 200 entities per page");

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

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

System.***out***.println("Entities:150" );

**int** totalRecord = 150;

**int** perRecord = 5;

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

String letter = sc.nextLine();

**switch**(letter) {

**case** "a":

**case** "A":

perRecord = 10;

**break**;

**case** "b":

**case** "B":

perRecord = 20;

**break**;

**case** "c":

**case** "C":

perRecord = 50;

**break**;

**case** "d":

**case** "D":

perRecord = 100;

**break**;

**case** "e":

**case** "E":

perRecord = 200;

**break**;

}

**if**( totalRecord % perRecord == 0){

**for**(**int** i = 1; i <= totalRecord / perRecord; i++) {

System.***out***.println("page" + i + perRecord);

}

}**else** {

**int** page = totalRecord / perRecord;

**for**(**int** i = 1; i <= totalRecord / perRecord; i++) {

System.***out***.println("page" + i + perRecord);

}

System.***out***.println("page" + (page + 1) + totalRecord % perRecord);

}

}

}