

(الأسماء)

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NormalBurger

- A- The first type of sandwiches will be the normal burger sandwich, each sandwich will have its name, type of meat (Beef or Chicken), type of roll bread (white bread or brown bread) and price. This type of sandwiches will also have only four available additions with separate prices like "extra cheese" or "extra tomato". Help her with calculating the total bill.

```
class NormalBurger {

    protected String name;
    protected String typeOfMeat;
    protected String typeOfBread;
    protected double price = 0;
    protected String additions[] = {"Cheese", "Pepsi", "Potatoes", "Tomatoes"};
    protected int additionsPrices[] = {10, 8, 15, 5};
    protected int amounts[] = new int[4];
    Scanner sc = new Scanner(System.in);

    public NormalBurger(String name) {
        this.name = name;
    }

    void typeOfBread(int a) {
        if (a == 1) {
            typeOfBread = "White Bread";
            this.price += 10; // 10 is the price of white bread
        } else if (a == 2) {
            typeOfBread = "Brown Bread";
            this.price += 15; // 15 is the price of brown bread
        }
    }
}
```

```

void typeOfMeat(int a) {
    if (a == 1) {
        this.typeOfMeat = "Meat";
        this.price += 25; // 25 is the price meat
    } else if (a == 2) {
        this.typeOfMeat = "Chicken";
        this.price += 20; // 20 is the price of chicken
    }
}

void getaddition() {

    System.out.println("We have 4 additions for you Cheese,Pepsi,Potatoes and Tomatoes");
    for (int i = 0; i < amounts.length; i++) {
        System.out.println("Enter the amount of " + additions[i] + " that you want");
        amounts[i] = sc.nextInt();
    }
}

```

```

void totalPrice(int a) { // 0 for no additions and 1 for addition
    System.out.println("Your bill are :");
    System.out.println("Your sandwich is :\n" + name + "\t" + typeOfBread + "\t" + typeOfMeat + "\t" + price + " LE");
    switch (a) {
        case 0:
            System.out.println("Your total price = " + price);
        case 1:
            System.out.println("Your additions are :");
            for (int i = 0; i < amounts.length; i++) {
                int x = amounts[i] * additionsPrices[i];
                System.out.println(amounts[i] + "\t" + additions[i] + "\t" + x + " LE");
                price += x;
            }
            System.out.println("Your total bill = " + price + " LE");
    }
}
}

```

Healthy Burger

- B- The second type of sandwiches will be "Healthy Burger" and it is exactly the same except for the roll type bread will be only "brown" and also there will be only two additions for this kind of sandwich.

```
class HealthyBurger extends NormalBurger {  
    public HealthyBurger(String name) {  
        super(name);  
        typeOfBread = "Brown Bread";  
        price += 15;  
    }  
    @Override  
    void getaddition() {  
        System.out.println("We have 4 additions for you");  
        for (int i = 0; i < additions.length; i++) {  
            System.out.println("press " + (i + 1) + "for " + additions[i]);  
        }  
        System.out.println("You can choose only 2 additions");  
        for (int i = 0; i < 2; i++) {  
            System.out.println("Enter the number of the additions that you want :");  
            int x = sc.nextInt();  
            System.out.println("Enter the amount");  
            int y = sc.nextInt();  
            amounts[x - 1] = y;  
            if (i == 0) {  
                System.out.println("Do you want other addition? press 1 for Yes or 2 for No");  
                int z = sc.nextInt();  
                if (z == 2) {  
                    break;  
                }  
            }  
        }  
    }  
}
```

```

@Override
void totalPrice(int a) {
    System.out.println("Your bill are :");
    System.out.println("Your sandwich is :\n" + name + "\t" + typeOfBread + "\t" + typeOfMeat + "\t" + price + " LE");
    switch (a) {
        case 0:
            System.out.println("Your total price = " + price);
        case 1:
            System.out.println("Your additions are :");
            for (int i = 0; i < amounts.length; i++) {
                if (amounts[i] != 0) {
                    int x = amounts[i] * additionsPrices[i];
                    System.out.println(amounts[i] + "\t" + additions[i] + "\t" + x + " LE");
                    price += x;
                }
            }
            System.out.println("Your total bill = " + price + " LE");
    }
}
}

```

Deluxe Burger

- C- The Third type of sandwiches will be “Deluxe Burger”, this type will only have one white roll type bread, beef meat and there are two constant additions which are chips and a drink and the total price for this meal is L.E 60.

```

class DeluxeBurger extends NormalBurger {

    public DeluxeBurger(String name) {
        super(name);
        typeOfBread = "White Bread";
        typeOfMeat = "Meat";
        price = 60;
    }

    void totalPrice() {
        System.out.println("Your bill are :");
        System.out.println("Your sandwich is :\n" + name + "\t" + typeOfBread + "\t" + typeOfMeat);
        System.out.println("the additions :\nchips\npepsi");
        System.out.println("Your total price = " + price);
    }
}

```

Main class

```
public class Project {  
  
    public static void main(String[] args) {  
        Scanner ss = new Scanner(System.in);  
        System.out.println("Welcome In Our Burger Restaurant,Please Choose your Sandwich");  
        System.out.println("1 for Normal Burger\n2 for Healthy Burger\n3 for Deluxe Burger");  
        int burger = ss.nextInt();  
        if (burger == 1) {  
  
            NormalBurger n = new NormalBurger("Normal Burger");  
            System.out.println("Enter your type of bread :\n1 for white bread\n2 for brown bread");  
            n.typeOfBread(ss.nextInt());  
            System.out.println("Enter your type of meat :\n1 for meat\n2 for chicken");  
            n.typeOfMeat(ss.nextInt());  
            System.out.println("Do you want any additions?\nIf yes press 1 else press 0");  
            int check = ss.nextInt();  
            if (check == 1) {  
                n.getaddition();  
            }  
            n.totalPrice(check);  
            System.out.println("Your order 'll be ready in 30m");  
        }  
  
        else if (burger == 2) {  
            HealthyBurger h = new HealthyBurger("Healthy Burger");  
            System.out.println("Enter your type of meat :\n1 for meat\n2 for chicken");  
            h.typeOfMeat(ss.nextInt());  
            System.out.println("Do you want any additions?\nIf yes press 1 else press 0");  
            int check = ss.nextInt();  
            if (check == 1) {  
                h.getaddition();  
            }  
            h.totalPrice(check);  
            System.out.println("Your order 'll be ready in 30m");  
        }  
        else if (burger == 3) {  
            DeluxeBurger d = new DeluxeBurger("Deluxe Burger");  
            d.totalPrice();  
        }  
    }  
}
```

Run NormalBurger class

```
Output - project (run)
Welcome In Our Burger Restaurant,Please Choose your Sandwitch
1 for Normal Burger
2 for Healthy Burger
3 for Deluxe Burger
1
Enter your type of bread :
1 for white bread
2 for browen bread
1
Enter your type of meat :
1 for meat
2 for chicken
2
Do you want any additions?
If yes press 1 else press 0
1
We have 4 additions for you Cheese,Pepsi,Potatoes and Tomatoes
Enter the amount of Cheese that you want
0
Enter the amount of Pepsi that you want
1
Enter the amount of Potatoes that you want
1
Enter the amount of Tomatoes that you want
0
Your bill are :
Your sandwitch is :
Normal Burger    White Bread    Chicken 30.0 LE
Your additions are :
0      Cheese    0 LE
1      Pepsi     8 LE
1      Potatoes          15 LE
0      Tomatoes          0 LE
Your total bill = 53.0 LE
Your order 'll be ready in 30m
```

Run HealthyBurger class

Output - project (run) #3

```
run:
Welcome In Our Burger Restaurant, Please Choose your Sandwitch
1 for Normal Burger
2 for Healthy Burger
3 for Deluxe Burger
2
Enter your type of meat :
1 for meat
2 for chicken
1
Do you want any additions?
If yes press 1 else press 0
1
We have 4 additions for you
press 1 for Cheese
press 2 for Pepsi
press 3 for Potatoes
press 4 for Tomatoes
You can choose only 2 additions
Enter the number of the additions that you want :
1
Enter the amount
1
Do you want other addition? press 1 for Yes or 2 for No
2
Your bill are :
Your sandwitch is :
Healthy Burger  Brown Bread      Meat      40.0 LE
Your additions are :
1      Cheese  10 LE
Your total bill = 50.0 LE
Your order 'll be ready in 30m
BUILD SUCCESSFUL (total time: 11 seconds)
```


Run DeluxeBurger class

```
Output - project (run) #3
run:
Welcome In Our Burger Restaurant, Please Choose your Sandwich
1 for Normal Burger
2 for Healthy Burger
3 for Deluxe Burger

3
Your bill are :
Your sandwich is :
Deluxe Burger   White Bread   Meat
the additions :
chips
pepsi
Your total price = 60.0
BUILD SUCCESSFUL (total time: 6 seconds)
|
```