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public abstract class Advertisement {

    protected int advertisementId;
protected String priority;    protected int
noOfDays;
    protected String clientName;

    public void setAdvertisementId(int advertisementId) {
        this.advertisementId = advertisementId;
    }

    public int getAdvertisementId() {
        return advertisementId;
    }

    public void setPriority(String priority) {
this.priority = priority;
    }

    public String getPriority() {
return priority;
    }

    public void setNoOfDays(int noOfDays) {
        this.noOfDays = noOfDays;
    }

    public int getNoOfDays() {
return noOfDays;
    }

    public void setClientName(String clientName) {
this.clientName = clientName;
    }

    public String getClientName() {
return clientName;
    }

    public Advertisement(int advertisementId, String priority, int
noOfDays, String clientName) {
        this.advertisementId = advertisementId;
        this.priority = priority;
this.noOfDays = noOfDays;
        this.clientName = clientName;
    }

    public abstract float calculateAdvertisementCharge(float baseCost);

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}
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import
java.util.*; public
class BonBon {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the advertisement id");
        int id = sc.nextInt();

        System.out.println("Enter the priority(high, medium, low)");
        String priority = sc.next();

        System.out.println("Enter the no of days advertisement is published");
        int num = sc.nextInt();

        System.out.println("Enter the client name");
        String name = sc.nextLine();
sc.nextLine();

        System.out.println("Enter the type of Advertisement
(video/image/text)");
        String type = sc.next();

        if(type.equalsIgnoreCase("video")) {
            System.out.println("Enter the duration in minutes");
            int min = sc.nextInt();
            VideoAdvertisement obj = new VideoAdvertisement(id,
priority, num, name, min);
            System.out.println("Enter the base cost");
            float base = sc.nextFloat();
            System.out.println("The Advertisement cost is " +
obj.calculateAdvertisementCharge(base));
        }
        else if(type.equalsIgnoreCase("image")) {
            System.out.println("Enter the number of inches");
            int inc = sc.nextInt();
            VideoAdvertisement obj = new VideoAdvertisement(id,
priority, num, name, inc);
            System.out.println("Enter the base cost");
            float base1 = sc.nextFloat();
            System.out.println("The Advertisement cost is " +
obj.calculateAdvertisementCharge(base1));
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    }
    else if(type.equalsIgnoreCase("text")) {
        System.out.println("Enter the number of characters");
        int text = sc.nextInt();
        VideoAdvertisement obj = new VideoAdvertisement(id,
priority, num, name, text);
        System.out.println("Enter the base cost");
        float base2 = sc.nextFloat();
        System.out.println("The Advertisement cost is " +
obj.calculateAdvertisementCharge(base2));
    }
}
}

```

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public class ImageAdvertisement extends Advertisement {

    private int inches;

    public void setInches(int inches) {
        this.inches = inches;
    }

    public int getInches() {
return inches;
    }

    public ImageAdvertisement(int advertisementId, String priority, int
noOfDays, String clientName, int inches) {
        super(advertisementId, priority, noOfDays, clientName);
        this.inches = inches;
    }

    public float calculateAdvertisementCharge(float baseCost) {
float baseAdvertisementCost;
        baseAdvertisementCost = baseCost * inches * noOfDays;
        float boosterCost = 0;
float serviceCost = 0;
if(priority.equals("high")) {
            boosterCost = (float) (0.1 * baseAdvertisementCost);
            serviceCost = 1000;
        }
        else if(priority.equals("medium")) {
            boosterCost = (float) (0.0 * baseAdvertisementCost);
            serviceCost = 700;
        }
    }
}

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        else if(priority.equals("low")) {
            boosterCost = 0;
            serviceCost = 200;
        }
        return baseAdvertisementCost + boosterCost + serviceCost;
    }
}

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    public class TextAdvertisement extends
Advertisement{

    private int noOfCharacters;

        public void setNoOfCharacters(int
noOfCharacters) {
            this.noOfCharacters = noOfCharacters;
        }

        public int getNoOfCharacters() {
            return noOfCharacters;
        }

        public TextAdvertisement(int advertisementId, String priority, int
noOfDays, String clientName, int noOfCharacters) {
            super(advertisementId, priority, noOfDays, clientName);
            this.noOfCharacters = noOfCharacters;
        }

        public float calculateAdvertisementCharge(float baseCost) {
            float baseAdvertisementCost;
            baseAdvertisementCost = baseCost * noOfCharacters * noOfDays;
            float boosterCost = 0;
float serviceCost = 0;
            if(priority.equals("high")) {
                boosterCost = (float) (0.1 * baseAdvertisementCost);
                serviceCost = 1000;
            }
            else if(priority.equals("medium")) {
                boosterCost = (float) (0.0 * baseAdvertisementCost);
                serviceCost = 700;
            }
        }
    }
}

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        else if(priority.equals("low")) {
            boosterCost = 0;
            serviceCost = 200;
        }
        return baseAdvertisementCost + boosterCost + serviceCost;
    }
}

```

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public class VideoAdvertisement extends Advertisement{

    private int duration;

    public void setDuration(int duration) {
        this.duration = duration;
    }

    public int getDuration() {
return duration;
    }

    public VideoAdvertisement(int advertisementId, String priority, int
noOfDays, String clientName, int duration) {
        super(advertisementId, priority, noOfDays, clientName);
        this.duration = duration;
    }

    public float calculateAdvertisementCharge(float baseCost) {
float baseAdvertisementCost;
        baseAdvertisementCost = baseCost * duration * noOfDays;
        float boosterCost = 0;           float serviceCost = 0;
        if(priority.equals("high")) {           boosterCost =
(float) (0.1 * baseAdvertisementCost);           serviceCost =
1000;
        }
        else if(priority.equals("medium")) {
            boosterCost = (float) (0.07 * baseAdvertisementCost);
            serviceCost = 700;
        }
        else if(priority.equals("low")) {
boosterCost = 0;
            serviceCost = 200;
        }
    }
}

```

```
    }  
    return baseAdvertisementCost + boosterCost + serviceCost;  
}  
  
}
```