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G:\M3_Programación\P17_UF2_M3\src\p17_uf2_m3\P17_UF2_M3.  
java
```

```
// author @josep garcia acenero  
package p17_uf2_m3;  
//imports
```

```
import java.text.DecimalFormat;  
import java.util.Scanner;
```

```
public class P17_UF2_M3 {  
    //global declarations
```

```
    public static final String COLOR_RESET = "\u001B[0m";  
    public static final String COLOR_GREEN = "\u001B[32m";  
    public static final String COLOR_YELLOW = "\u001B[33m";  
    public static final String COLOR_PURPLE = "\u001B[35m";  
    static Scanner keyboard = new Scanner(System.in);
```

```
    public static void main(String[] args) {  
        //variables  
        int coin = 0, option;  
        System.out.print("Input your coin value: ");  
        coin = keyboard.nextInt();  
        do { //start of menu  
            usermenu();  
            option = keyboard.nextInt();  
            switch (option) {  
                case 1:  
                    float dollConv = intToFloat(coin); //call method  
                    valuesPrint(option, coin, dollConv, 0.0, "", 0,  
0, ""); //call method  
                    break;  
                case 2:  
                    double poundConv = intToDouble(coin); //call  
method  
                    valuesPrint(option, coin, (float) 0.0,  
poundConv, "", 0, 0, ""); //call method  
                    break;  
                case 3:  
                    String yenConv = intToString(coin); //call method  
                    valuesPrint(option, coin, (float) 0.0, 0.0,  
yenConv, 0, 0, ""); //call method  
                    break;  
                case 4:  
                    int bitConv = stringToInt(coin); //call method  
                    valuesPrint(option, coin, (float) 0.0, 0.0, "",  
bitConv, 0, ""); //call method  
                    break;  
                case 5:  
                    int solesConv = floatToInt(coin); //call method  
                    valuesPrint(option, coin, (float) 0.0, 0.0, "",  
0, solesConv, ""); //call method  
                    break;  
                case 6:  
                    String pesosConv = floatToString(coin);  
                    valuesPrint(option, coin, (float) 0.0, 0.0, "",  
0, 0, pesosConv); //call method
```

```

        break;
    case 7:
        char letter;
        System.out.print("Input letter: ");
        letter = (keyboard.next()).charAt(0);
        String binary = Integer.toBinaryString(letter);
        int intConv = charToInt(letter); //call method
        System.out.println("Letter: " + letter + "=Int
value: " + intConv + "=Binary value= " + binary);
        break;
    case 8:
        String word;
        System.out.print("Input a word: ");
        word = keyboard.next();
        String wordBin = stringToBinary(word); //call
method

        System.out.println(word + "=" + wordBin + " ");
        break;
    case 9:
        int number;
        System.out.print("Input number: ");
        number = keyboard.nextInt();
        char numberChar = intToChar(number); //call
method

        System.out.println(number + "=" + numberChar);

        break;
    case 10:
        //Es un código de caracteres, se creó para poder
dar números a los caracteres para poder utilizarlos en computación.
        asciiTable(); //call method
        break;
    case 0:
        System.out.println("*****Thanks for using our
program*****");
        break;
    default:
        System.out.println("Invalid option");
    }

    } while (option != 0); //end of menu
}

```

```

//part 1 int to float (gets euro(int) returns dollars(float))
private static float intToFloat(int euros) {
    //variables
    float dollars = 0;
    //eu to dollars
    dollars = (float) euros / 0.91f;
    return dollars;
}

//part 2 int to double (gets euro(int) returns pounds(double))
private static double intToDouble(int euros) {
    //variables
    float pounds = 0;
    //eu to pounds
    pounds = euros / 1.18f;
    return pounds;
}

```

```

    }

    //part 3 int to String (gets euro(int) returns yens(String))
    private static String intToString(int euros) {
        //variables
        double yens;
        //eu to yens
        yens = (float) euros / 0.0083f;
        String yensStr = String.valueOf(yens);
        return yensStr;
    }

    //part 4 String to int (gets euro(int converts to string) returns
    Bitcoins(int))
    private static int stringToInt(int euros) {
        //variables
        String eurostr = String.valueOf(euros);
        int eurosint = Integer.parseInt(eurostr);
        int bitcoins;
        //eu to BTC
        bitcoins = (int) (eurosint / 9046.26f);
        return bitcoins;
    }

    //part 5 float to int (gets euro(int converts to float) returns
    Soles(int))
    private static int floatToInt(float euros) {
        //variables
        int soles;
        //eu to soles
        soles = (int) (euros / 0.27f);
        return soles;
    }

    //part 6 float to String (gets euros(float) return pesos(String))

    private static String floatToString(float euros) {
        //variables
        double pesos;
        //eu to yens
        pesos = euros / 0.0083f;
        String pesosStr = String.valueOf(pesos);
        return pesosStr;
    }

    //part 7 char to Int ascii code (gets character (char) return)
    private static int charToInt(char character) {
        //variables
        int asciiChar;
        asciiChar = (int) character;
        return asciiChar;
    }

    //part 8 converts string to binary
    private static String stringToBinary(String letters) {
        //variables
        StringBuilder binarys = new StringBuilder();
        for (int i = 0; i < letters.length(); i++) {
            int ascii = letters.charAt(i);
            binarys.append(Integer.toBinaryString(ascii));
        }
        return binarys.toString();
    }
}

```

```

//part 9 converts ascii to char equivalent
private static char intToChar(int num) {
    //variables
    char asciChar;
    asciChar = (char) num;
    return asciChar;
}

//part 10 prints the ascii table and converts int to char and
hexadecimal

private static void asciiTable() {
    //loop to generate ascii codes
    for (int i = 0; i < 255; i++) {
        System.out.println(i + ": " +
Integer.toString(i,16)//converts ascii value to hexadecimal
        + ": " + (char) i);//converts to char equivalent
    }
}

```

```

//Printing values with decimal format
private static void valuesPrint(int opMenu, int euroDef, float
dollarConvert, double poundConvert, String yenConvert, int
bitConvert, int solConvert, String pesConvert) {
    DecimalFormat df = new DecimalFormat(".00");
    //print values
    if (opMenu == 1) {
        System.out.println(df.format(euroDef) + "€ = " +
df.format(dollarConvert) + "$");
    }
    if (opMenu == 2) {
        System.out.println(df.format(euroDef) + "€ = " +
df.format(poundConvert) + "£");
    }
    if (opMenu == 3) {
        System.out.println(df.format(euroDef) + "€ = " +
yenConvert + "¥");
    }
    if (opMenu == 4) {
        System.out.println(df.format(euroDef) + "€ = " +
df.format(bitConvert) + "BTC");
    }
    if (opMenu == 5) {
        System.out.println(df.format(euroDef) + "€ = " +
df.format(solConvert) + "S/");
    }
    if (opMenu == 6) {
        System.out.println(df.format(euroDef) + "€ = " +
df.format(pesConvert) + "₲");
    }
}

```

```
//Menu options
private static void usermenu() { //Start of the menu
    System.out.println("");
    System.out.println("Euros to Dollars: ");
    System.out.println("Euros to Pounds: ");
    System.out.println("Euros to Yens: ");
    System.out.println("Euros to Bitcoins: ");
    System.out.println("Euros to Soles: ");
    System.out.println("Euros to Pesos: ");
    System.out.println("Letter to binary: ");
    System.out.println("Word to binary: ");
    System.out.println("Number to Char: ");
    System.out.println("ASCII Table: ");
    System.out.println("Option0: Exit");
    System.out.println("\nOption?: ");
} //end of menu
}
```

Menu

```
Input your coin value: 120

Euros to Dollars:
Euros to Pounds:
Euros to Yens:
Euros to Bitcoins:
Euros to Soles:
Euros to Pesos:
Option7:
Option0: Exit

Option?:
```

Part 1

```
Option?:
1
120,00€ = 131,87$
```

Part 2

```
2
120,00€ = 101,69£
```

Part 3

```
Option?:  
3  
120,00€ = 14457.83203125¥
```

Part 4:

```
Option?:  
4  
10000,00€ = 1,00BTC
```

Part 5

```
Option?:  
5  
120,00€ = 444,00S/
```

Part 6

```
Option?:  
6  
120,00€ = 14457.832P
```

Part 7

```
Option?:  
7  
Input letter: A  
Letter: A=Int value: 65=Binary value= 1000001
```

Part 8

```
Option?:  
8  
Input a word: Hello  
Hello=10010001100101110110011011001101111
```

Part 9

Option?:
9
Input number: 250
250=ú

Part 10

165: a5: ¥
166: a6: ¡
167: a7: §
168: a8: ¨
169: a9: ©
170: aa: º
171: ab: «
172: ac: ¬
173: ad: −
174: ae: ®
175: af: ¯
176: b0: °
177: b1: ±
178: b2: º
179: b3: º
180: b4: ´
181: b5: µ
182: b6: ¶
183: b7: ·
184: b8: ¸
185: b9: º
186: ba: °
187: bb: »
188: bc: ¼
189: bd: ½
190: be: ¾
191: bf: ¿
192: c0: À
193: c1: Á
194: c2: Â
195: c3: Ã
196: c4: Ä
197: c5: Å
198: c6: Æ
199: c7: Ç
`

etc ...