java

package zahtu.java;

import java.util.*;
public class rect {
public static void main (String[] args) {
Scanner scanner = new Scanner(System.*in*);
System.*out*.println("Enter the Length");
int length = scanner.nextInt();
System.*out*.println("Enter the Width");
int width = scanner.nextInt();
int area = length*width;
System.*out*.println("Area of the Rectangle:" + area);
}
}

```
package zahtu.java;
import java.util.*;
public class perimeter {
public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
System.out.println("Enter length of rectangle");
int length = scanner.nextInt();
System.out.println("Enter width of the rectangle");
int width = scanner.nextInt();
int perimeter = 2 * (length + width);
System.out.println("Perimeter of Rectangle:" + perimeter);
}
}
```

```
package zahtu.java;
import java.util.*;
public class BankAccount {
long acc_no;
double acc_balance;
BankAccount(){
```

```
acc_no = 0;
acc_balance = 0.0;
System.out.println("Account number:" + acc_no +"\t"+ "Account
balance:"+acc_balance);
}
BankAccount(long acc_no) {
acc_balance = 0.0;
System.out.println("Account number:" + acc_no + "\t" + "Account balance:" +
acc_balance );
}
BankAccount(long acc_no, double acc_balance){
System.out.println("Account number:" + acc_no + "\t" + "Account balance:" +
acc_balance);
}
public static void main (String[] args) {
BankAccount o1 = new BankAccount();
Scanner scanner = new Scanner(System.in);
System.out.println("Enter the Account Number:");
long a = scanner.nextLong();
System.out.println("Enter the Account Balance:");
long b = scanner.nextLong();
BankAccount o2 = new BankAccount(a);
BankAccount o3 = new BankAccount(a,b);
}
}
```

```
package zahtu.java;
import java.util.*;
public class BankAccount {
long acc_no;
double acc_balance;
BankAccount(){
acc_no = 0;
acc_balance = 0.0;
System.out.println("Account number:" + acc_no +"\t"+ "Account
balance:"+acc_balance);
}
BankAccount(long acc_no) {
```

```
acc_balance = 0.0;
System.out.println("Account number:" + acc_no + "\t" + "Account balance:" +
acc_balance );
}
BankAccount(long acc_no, double acc_balance){
System.out.println("Account number:" + acc_no + "\t" + "Account balance:" +
acc_balance);
}
public static void main (String[] args) {
BankAccount o1 = new BankAccount();
Scanner scanner = new Scanner(System.in);
System.out.println("Enter the Account Number:");
long a = scanner.nextLong();
System.out.println("Enter the Account Balance:");
long b = scanner.nextLong();
BankAccount o2 = new BankAccount(a);
BankAccount o3 = new BankAccount(a,b);
}
}
```

BMI python

```
def calculate_bmi(weight, height):
    """Calculates the BMI given weight and height."""
    return weight / (height ** 2)

def classify_bmi(bmi):
    """Classifies the BMI according to standard ranges."""
    if (bmi < 18.5):
        return "Underweight"
    elif (18.5 <= bmi < 24.9):
        return "Normal weight"
    elif (24.9 <= bmi < 29.9):
        return "Overweight"
    else:
        return "Obesity"

def main():
    """Main function to run the BMI calculator."""
    while True:
        print("\nBMI Calculator")
        # Get user input
        weight = float(input("Enter your weight (in kg): "))
        height = float(input("Enter your height (in meters): "))
        # Calculate BMI and classify it
        bmi = calculate_bmi(weight, height)
        category = classify_bmi(bmi)
        # Display results
        print(f"Your BMI is: {bmi:.2f}")
        print(f"BMI Category: {category}")

        # Ask if user wants to calculate again
        choice = input("Do you want to calculate another BMI? (yes/no):
").lower()
        if choice != 'yes':
            print("Exiting BMI Calculator. Stay healthy!(●'◡'●)")
            break
```

```
main()
```

python

```python
def reverse_string(s):
    return s[::-1]
def change_case(s):
    return s.swapcase()
def count_vowels(s):
    vowels = ("aeiouAEIOU")
    count = sum(1 for char in s if char in vowels)
    return count
def pallindrome(s):
    return s == s[::-1]
def capital(s):
    return s.capitalize()
def ends_with(s):
    return s.endswith("c")
def split(s):
    return s.split()
def title(s):
    return s.title()
def starts_with(s):
    return s.startswith("p")
def lenght(s):
    return len(s)

def main():
    print("Welcome to the string Program")
    while True:
        user_string = input ("Please enter your string or type 'exit' to quit
the program:")
        if user_string.lower() == 'exit':
            print ("Exiting the string manipulation program")
            break

        print("\n Choose an operation:")
        print("1. Reverse a string")
        print("2. Change case")
        print("3. Count vowels")
        print("4. Pallindrome")
```

```
        print("5. Capital")
        print("6. Ends with c")
        print("7. Split string")
        print("8. Title")
        print("9. Starts with p")
        print("10. Length")
        print("11. All of the above")

        choice = input("Please enter your choice:")
        if choice == '1':
            print(f"Reversed string: {reverse_string(user_string)}")
        elif choice == '2':
            print(f"Changed case: {change_case(user_string)}")
        elif choice == '3':
            print(f"Number of vowels: {count_vowels(user_string)}")
        elif choice == '4':
            pallindrome_result = "yes" if pallindrome(user_string) else "no"
            print(f"Pallindrome: {pallindrome_result}")
        elif choice == '5':
            print(f"Capital: {capital(user_string)}")
        elif choice == '6':
            print(f"Ends with c: {ends_with(user_string)}")
        elif choice == '7':
            print(f"Split string: {split(user_string)}")
        elif choice == '8':
            print(f"Title: {title(user_string)}")
        elif choice == '9':
            print(f"Starts with p: {starts_with(user_string)}")
        elif choice == '10':
            print(f"Length: {lenght(user_string)}")
        elif choice == '11':
            print(f"Reversed string: {reverse_string(user_string)}")
            print(f"Changed case: {change_case(user_string)}")
            print(f"Number of vowels: {count_vowels(user_string)}")
            pallindrome_result = "yes" if pallindrome(user_string) else "no"
            print(f"Pallindrome: {pallindrome_result}")
            print(f"Capital: {capital(user_string)}")
            print(f"Ends with c: {ends_with(user_string)}")
            print(f"Split string: {split(user_string)}")
            print(f"Title: {title(user_string)}")
```

```
            print(f"Starts with p: {starts_with(user_string)}")
            print(f"Length: {lenght(user_string)}")
        else:
            print("Invalid choice")

main()
```