USER INPUT AND CONDITIONAL STATEMENTS

**Q1.** Write a program that takes input a name from user & greet the user like this: Please enter your name: John Doe

Hi, John Doe

**Q2.** Write a program to take “city” name as input from user. If user enters “Karachi”, welcome the user like this: “Welcome to city of lights”.

Please Enter Your City: Karachi Welcome to city of lights

**Q3.** Write a program to take “gender” as input from user. If the user is male, give the message: Good Morning Sir. If the user is female, give the message: Good Morning Ma’am.

**Q4.** Write a program to take input color of road traffic signal from the user & show the message according to this table:

|  |  |
| --- | --- |
| **SIGNAL COLOR** | **MESSAGE** |
| RED | Vehicle must stop |
| YELLOW | Vehicles should get ready to move |
| GREEN | Vehicles can move now |

**Q5.** Write a program to take input max age & current age from user. If the current age is less than or equal to max age, show the message “You are welcome”.

**Q6.** Write a program to take input remaining fuel in car (in litres) from user. If the current fuel is less than 0.25litres, show the message “Please refill the fuel in your car”.

**Q7.** Write a program to take input the marks obtained in three subjects & total marks. Compute & show the resulting percentage on your page. Take percentage & compute grade as per following table:

|  |  |  |
| --- | --- | --- |
| **Percentage** | **Grade** | **Remarks** |
| Greater than or equal to  80 | A-one | Excellent |
| Greater than or equal to 70 | A | Good |
| Greater than or equal to  60 | B | You need to improve |
| Less than 60 | Fail | Sorry |

Show the total marks, marks obtained, percentage, grade & remarks like: Marks Sheet

Total Marks: 300

Marks Obtained: 219

Percentage: 73% Grade: B

Remarks: You need to improve

**Q8.** Write a program to implement checkout process of a shopping cart system for an e-commerce website. Take input from users, the following:

1. Name of item1
2. Name of item2
3. Price of item 1
4. Price of item 2
5. Ordered quantity of item 1
6. Ordered Quantity of item 2
7. Shipping charges

Compute the total cost. If the total cost is above 2000 PKR, offer them 10% discount & show the receipt in your browser.

Shopping Cart

Price of T-Shirt is 1000 Quantity of T-Shirt is 2 Price of USB Flash Drive is 3 Shipping Charges 250

Total Cost of Your Order is 4350 PKR Discounted Price is 3915 PKR

# Q9. Guess game:

Store a secret number (ranging from 1 to 10) in a variable. Prompt user to guess the secret number.

1. If user guesses the same number, show “Bingo! Correct answer”.
2. If the guessed number +1 is the secret number, show “Close enough to the correct answer”.

**Q10.** Write a program to check whether the given number is divisible by 3. Show the message to the user if the number is divisible by 3.

**Q11.** Names & Total scores of two teams are taken as input. Write a program that shows which team has won the game or show if there is a tie. (Team A or Team B)

Score of Team A: 90 Score of Team B: 95 Team B has won the game

**Q12.** Write a program that checks whether the given input is an even number or an odd number.

**Q13.** Weather in Karachi nowadays is too cool, write a program that takes temperature as input and shows a message based on following criteria:

1. T > 40 then “It is too hot outside.”
2. T > 30 then “The Weather today is Normal.”
3. T > 20 then “Today’s Weather is cool.”
4. T > 10 then “OMG! Today’s weather is so Cool.”

**Q14.** Write a program to create a calculator for +,-,\*, / & % using if statements. Take the following input:

1. First number
2. Second number
3. Operation (+, -, \*, /, %)

Compute & show the calculated result to user.

**Q15.** Write a program that takes user input day name. If the day is Monday, Tuesday, Wednesday, Thursday or Friday, then show “It’s a week day”. If the day is Saturday then show “It’s weekend”. If the day is Sunday then show “Yay! It’s a holiday”.

**Q16.** Write a program that takes input user’s score, if it’s greater than 50, say “You are passed”. Otherwise, show “Try again!”

**Q17.** Write a program that:

1. takes 2 numbers.
2. tells whichever number is the greater (higher) number.
3. tells if they are equal

Show the output to make sure it works (e.g. "The greater number of 5 and 10 is 10.").

# Q18. The Translator:

Write a program that:

* 1. takes 1 input, a language code (e.g. "es", "de", "en")
  2. tells "Hello, World" for the given language, for atleast 3
  3. languages. It should default to returning English.

(Hint: use translate.google.com to check the translation of hello world in different languages)

Enter Language Code: en Hello World

**Q19.** Write a program to take input a number & tell whether it’s a positive or negative number.

# Q20. The Pluralizer:

Write a program that:

1. takes 2 inputs, a noun and a number.
2. tells the number and pluralized form, like "5 cats" or "1 dog".

Run the program for a few different inputs and show the result to make sure it works

Please enter a number: 4 Please enter a noun: boat 4 boats