**Question 1:**

**Done**

**Question 2:**

Personal Message: Store a person’s name in a variable, and print a message to that person. Your message should be simple, such as, “Hello Eric,

would you like to learn some Python today?”

let person :String = " Hello Eric "

console.log (person , " would you like to learn some Python today? ")

**OUTPUT**

Hello Eric would you like to learn some Python today?

**Question :3**

let my\_name:string = "Shaman Balouch";

// lower case

console.log ("this one for lower case ");

let lowercase : string = my\_name.toLowerCase();

console.log (lowercase);

// upper case

console.log ("this one for upper case ");

  let uppercase :string = my\_name.toUpperCase();

  console.log (uppercase);

**Output:**

this one for lower case

shaman balouch

this one for upper case

SHAMAN BALOUCH

**Title case**

const personName: string = "shaman balouch ";

const words: string[] = personName.split(" ");

let titleCase: string = "";

// Iterate through each word and convert to title case

for (let i = 0; i < words.length; i++) {

    titleCase += words[i].charAt(0).toUpperCase() + words[i].slice(1).toLowerCase() + " ";

}

console.log(titleCase.trim());

OUTPUT

Shaman Balouch

Question 4: Famous Quote: Find a quote from a famous person you admire. Print the quote and the name of its author. Your output should look something like the

following, including the quotation marks:

Albert Einstein once said, “A person who never made a mistake never tried anything new.”

console.log('Quaid-e-Azam once said , " work , work ,work , and work frse work dobara work fr dobara work sona bi hai ya nai  😂🤣😁 . "')

console.log("above just jock but if you work hard u will be success in your life ")

console.log(' Albert Einstein once said, “A person who never made a mistake never tried anything new.”')

**OUTPUT**

PS C:\Users\PC\Desktop\typeScript> tsc main.ts

PS C:\Users\PC\Desktop\typeScript> node main.js

Quaid-e-Azam once said , " work , work ,work , and work frse work dobara work fr dobara work sona bi hai ya nai 😂🤣😁 . "

above just jock but if you work hard u will be success in your life

Albert Einstein once said, “A person who never made a mistake never tried anything new.”

**Question 5**

let famous\_person :string = " Quaid-e-Azam";

let message :string = famous\_person + 'once said , " work , work , work and work " ';

console.log(message);

**OUTPUT**

Quaid-e-Azam once said , " work , work , work and work "

Question 6:  Stripping Names: Store a person’s name, and include some whitespace characters at the beginning and end of the name. Make sure you use each

character combination, "\t" and "\n", at least once. Print the name once, so the whitespace around the name is displayed. Then print the name after striping the white spaces.

let my\_name :string = "\t shaman baloch \n";

console.log("Name with whitespace " , my\_name);

let strippedName : string = my\_name.trim()

console.log("strippedName ", strippedName);

**OUTPUT**

Name with whitespace shaman baloch

strippedName shaman Baloch

Question 7: Number Eight: Write addition, subtraction, multiplication, and division operations that each result in the number 8. Be sure to enclose your operations in print statements to see the results.

//addtition of two number

const Addition :number=4+4

console.log(Addition)

//subtraction  of two number

const substraction :number=12-4

console.log(substraction)

//multilpication  of two number

const multplication :number=4\*2

console.log(multplication)

//division  of two number

const divisition :number=64/8

console.log(divisition)

**OUTPUT:**

PS C:\Users\PC\Desktop\typeScript> tsc main.ts

PS C:\Users\PC\Desktop\typeScript> node main.js

8

8

8

8

**Question 8**

console.log ("print sum of two number in four lines ");

console.log (5+3);

console.log (5+3);

console.log (5+3);

console.log (5+3);

console.log ("if each lines output  8 then , then above output is correct");

**Output:**

print sum of two number in four lines

8

8

8

8

if each lines output 8 then , then above output is correct

Question 9: Favorite Number: Store your favorite number in a variable. Then, using that variable, create a message that reveals your favorite number. Print that message.

let favoritenumber:number = 4

let message  :string = `My favorite number is  ${ favoritenumber} `;

console.log(message)

**OUTPUT**

My favorite number is 4

**Question 10**

**Comments means simple add comment in your code , if any other user use this code , that person understood what you wants to say**

Adding Comments: Choose two of the programs you’ve written, and add at least one comment to each. If you don’t have anything specific to write

because your programs are too simple at this point, just add your name and the current date at the top of each program file. Then write one sentence

describing what the program does.

//plz don't change value of a or b if u change value of a or b then all function will be change

let a:number =20

let b:number=2

console.log("addition of two number is ", a+b)

console.log("substraction of two number is ", a-b)

console.log("division of two number is ", a/b)

console.log("multiplication of two number is ", a\*b)

**Question 13:** Your Own Array: Think of your favorite mode of transportation, such as a motorcycle or a car, and make a list that stores several examples. Use your list

to print a series of statements about these items, such as “I would like to own a Honda motorcycle.”

let favorite\_transportation :Array<[transport:string , brand:string]> = []

favorite\_transportation.push(["car" , "civic"])

favorite\_transportation.push(["motocycle" , "Honda"])

//using for each loop

favorite\_transportation.forEach(( [transport, brand]) =>

{console.log(` I would like to awon ${brand}  ${transport}`)}

    )

**Output:**

I would like to won civic car

I would like to won Honda monocycle

Question 14:  Guest List: If you could invite anyone, living or deceased, to dinner, who would you invite? Make a list that includes at least three people you’d like to

invite to dinner. Then use your list to print a message to each person, inviting them to dinner.

let guestList: Array<string> = [

    "Zia khan ",

    "Asif ali " ,

    "Anwer ali " ,

    "Muhmmad Ali Jinnah"

];

// loop for each to print invitation

guestList.forEach((guestName) =>

 {

    console.log(`Dear ${guestName} , you are inivted to dinner please join us.`)

})

OUTPUT:

Dear Zia khan , you are inivted to dinner please join us.

Dear Asif ali , you are inivted to dinner please join us.

Dear Anwer ali , you are inivted to dinner please join us.

Dear Muhmmad Ali Jinnah , you are inivted to dinner please join us.

Question15: Changing Guest List: You just heard that one of your guests can’t make the dinner, so you need to send out a new set of invitations. You’ll have to think of

someone else to invite.  Start with your program from Exercise 14. Add a print statement at the

end of your program stating the name of the guest who can’t make it.

• Modify your list, replacing the name of the guest who can’t make it with

the name of the new person you are inviting.

• Print a second set of invitation messages, one for each person who is still

in your list.

let guestList: Array<string> = [

    "Zia khan ",

    "Asif ali " ,

    "Anwer ali " ,

    "Muhmmad Ali Jinnah"

];

// step 1 print the name of person who can't make it

let guestHowCantMakeIt : string = "Muhmmad Ali Jinnah"

console.log (` ${guestHowCantMakeIt} can't make it to Dinner `)

// step 2 Replace the name of guest  who can't ,make it

let NewGust :string = " Ahmed ali "

let indexOfguestHowCantMakeIt :number = guestList.indexOf(guestHowCantMakeIt)

// console.log(indexOfguestHowCantMakeIt)

if ( indexOfguestHowCantMakeIt!= -1){

    guestList[indexOfguestHowCantMakeIt] = NewGust

}

// console.log(guestList[2])

//step 3 print a second set of inventation message

console.log("secod set of invitation message : ")

guestList.forEach((guest:string) =>

{

    console.log(` Dear ${guest} , you are invited to in dinner . `)

})