**LAB WORK 2**

**QUESTION #1**

**ALGORITHM:**

**1.** Display greetings to the customer.

**2.** Offer the menu to the customer.

**3**. Take the order.

**4**. Ask the customer to add on something.

**5.** Tell the waiting time.

**6.** Calculate the bill.

**7.** Serve the order.

**8.** Display thank you.

**PSEUDOCODE:**

1. Start.
2. Display “Welcome to our restaurant.”
3. Display menu.
4. Read order.
5. If add on

then read add on

else

Display waiting time

End if

1. Calculate the bill.
2. Serve the order
3. Display “thank you”
4. End.

**FLOWCHART:**

Start

Display “welcome”

Display menu

Read order

Read **add on**

IF add on

Calculate bill

End

**QUESTION # 2**

**ALGORITHM:**

1. Display welcome.
2. Ask the user to enter pin.
3. Read the pin whether it is correct or not.

IF correct proceed to withdrawal.

1. Ask the cash withdrawal amount.
2. Read withdrawal amount.
3. Check if selected amount is available or not in account

IF available proceed to withdrawal.

1. Print cash.
2. Display thank you.

**PSEUDOCODE:**

1. Start.
2. Display “welcome”
3. Display “Enter pin”
4. Read pin

IF correct proceed to withdrawal.

Else

Display “enter pin”

1. Display “select cash amount”
2. Read cash amount.

IF cash is present in account

then proceed to withdrawal.

Else

Display “cash is not available in your account”

1. Print cash.
2. Display “thank you”

**FLOWCHART**

Start

Display cash amount options

**YES**

Print cash

**NO**

IF pin is correct

Display welcome

Display cash not available

IF cash is in account

Read cash amount

Read pin

Display “Enter pin”

End

**QUESTION # 3**

**ALGORITHM:**

1. Ask the user to enter number 1
2. Read NUM1
3. Ask the user to enter number 2
4. Read NUM2
5. Ask the user to enter number 3
6. Read NUM3
7. IF NUM1>NUM2 and NUM3

then display NUM1 is greatest.

1. IF NUM2> NUM1 and NUM3

then display NUM2 is greatest.

1. IF NUM3>NUM1 and NUM2

then display NUM3 is greatest.

1. End.

**PSEUDOCODE:**

1. Start
2. Display “Enter Number 1”
3. Read NUM1.
4. Display “Enter Number 2”
5. Read NUM2.
6. Display “Enter Number 3”
7. Read NUM3.
8. IF NUM1>NUM2 and NUM 3

then print “Number 1 is greatest”, NUM1

IF NUM2 > NUM1 and NUM3

then print “Number 2 is greatest”, NUM2

IF NUM3 > NUM1 and NUM2

then print “Number 3 is greatest”, NUM3

End if.

1. End if

**FLOWCHART**

Start

Display “Enter Number 1”

Read NUM1

Read NUM2.

Display “Enter Number 3”

Display “Enter Number 2”

Read NUM3.

YES

IF NUM1>NUM2 and NUM 3

Display” NUM1 is greatest”

NO

IF NUM2> NUM1 and NUM3

YES

Display “NUM2 is greatest”

YES

NO

NO

END

Display “NUM3 is greatest”

IF NUM3> NUM2 and NUM1

**QUESTION # 4:**

* Start.
* Ask the user to enter a number between 1 to 12
* Read number

If number==1

then display January

else if number=2

then display February

else if number==3

then display March

else if number==4

then display April

else if number==5

then display May

else if number==6

then display June

else if number==7

then display July

else if number==8

then display August

else if number==9

then display September

else if number==10

then display October

else if number==11

then display November

else if number==12

then display December

* End.

**QUESTION # 5**

* Start.
* Ask the user to enter a number.
* Input NUM1
* Ask the user to enter second number.
* Input NUM2
* Display “Enter an operation + or – ‘’
* Input operation

If operation == +

then calculate sum=NUM1+NUM2

display sum

else if operation == -

then calculate difference=NUM1-NUM2

display difference

* End

**QUESTION # 6**

Start

Display “what are your requirements”

Process the order

Read requirements

YES

Assemble the component

NO

YES

NOO

Fix errors

If test is clear

Test the car

Finish the production

Assemble engine

Assemble the brake system

Fulfill them

If not available

Calculate requirement

Deliver the car

Get cash

Calculate bill

End

Display thank you

**QUESTION # 6**

* Start.
* Ask the user to enter a number.
* Read NUM1
* Ask the user to enter another number.
* Read NUM2
* Display “Enter operation (+, -, /, %)”
* Read OP

If OP = /

then calculate result =NUM1/NUM2

else if OP=\*

then calculate result=NUM1\*NUM2

else if OP== +

then calculate result=NUM1+NUM2

else if OP==NUM1-NUM2

then calculate result=NUM1-NUM2

else if OP== %

then calculate result=%NUM and %NUM2

* Display result
* End.

**QUESTION # 9**

Gitignore is very useful as it tells us about the files and repositories that we should ignore in git. It also has the following uses:

* The files that we add in gitignore cannot be tracked or added in the repository.
* It keeps our repository clean and organized.
* We can manage files efficiently.
* It also helps us to protect our sensitive data.
* It also prevents from adding certain files in the repositories.

**QUESTION # 10**

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| --- | --- |
| **ALGORITHM** | **PSEUDOCODE** |
| * Algorithm is a step by step procedure to solve a specific problem. | * Pseudocode is a way to explain an algorithm in a readable form using specific functions. |
| * An algorithm uses a finite set of instruction to carry out a particular task. | * Pseudocode does follow any specific set of rule. |
| * Algorithm does not use specific instructions and functions. | * Pseudocode uses conditionals, loops and functions such as, if, end if, read, display etc. |