Saad A Razzaq - 20F-0292 # BS PF Lab
Lab#1

Q#1:- Solution:-

1.0: Start
2.0: Declare retailprice, salestax, totalsale, taxRate
3.0: Print "Enter the retail price of item"
4.0: Input retailPrice
5.0 Print "Enter sales tax rate"
6.0 Input taxRate
7.0 sales_tax ← retailPrice * (taxRate /100)
8.0 totalSale ← Salestax + retailPrice
9.0 Print "The sales tax for the purchase is: ", Salestax
10.0 Print "The total sale is: ", totalSale
11.0 end.

Q#2:- Solution:-

1.0 Start
2.0 Declare math, science, english, urdu, ~~total~~Obtained, total, percentage, totalMath, totalscience, totalenglish, totalUrdu
3.0 Print "Enter obtained math marks"
4.0 Input math
5.0 Print "Enter total math marks"
6.0 Input totalMath.
7.0 Print "Enter obtained science marks"
8.0 Input science
9.0 Print "Enter total science marks".
10.0 Input totalScience
11.0 Print "Enter obtained english marks"
12.0 Input english.
13.0 Print "Enter total english marks"
14.0 Input totalEnglish.
15.0 Print "Enter obtained urdu marks"
16.0 Input urdu.
17.0 Print "Enter total urdu marks"
18.0 Input totalUrdu
19.0 Obtained ← (math + science + english + urdu).
20.0 Total ← (totalMath + totalScience + totalEnglish + totalUrdu)
21.0 Percentage ← (Obtained/total) *100
22.0 Print "Percentage marks: ", percentage.
23.0 end.

Q#3:-

Solution:-

```
1.0  Start
2.0  Declare price, discountedPrice
3.0  Print "Enter price of shirt"
4.0  Input price.
5.0  Print "The discounted price on shirt is"
6.0  discountedPrice ← Price * 0.1
7.0  Print discountedPrice
8.0  end.
```

Q#4:-

Solution:-

```
1.0  Start.
2.0  Declare m1, m2, m3, avrg.
3.0  Print "Enter marks of first student".
4.0  Input m1.
5.0  Print "Enter maks of second student"
6.0  Input m2.
7.0  Print "Enter marks of third student"
8.0  Input m3.
9.0  Avrg ← (m1+m2+m3)/3
10.0 Print "Avrg marks of class is ", Avrg.
11.0 end.
```

Q#5:-

Solution:-

```
1.0  StarT
2.0  Declare salary, BonusSalary
3.0  Print "Enter salary"
4.0  Input salary
5.0  If salary > 1500 then
5.1      BonusSalary ← Salary + 100
6.0  endif.
7.0  Print "Bonus Salary is: ", BonusSalary
8.0  end.
```

Q#6:-

Solution:-

```
1.0  Start
2.0  Declare num
3.0  Print "Enter number"
4.0  Input num
5.0  If num % 2 = 0 then
5.1      Print "Number is even".
6.0  else
6.1      Print "Number is odd".
7.0  end
```

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Solution:-

1.0 Start
2.0 Declare ch
3.0 Print "Enter a character"
4.0 Input ch.
5.0 If ch = 'a' or ch = 'i' or ch = 'o' or ch = 'e' or ch = 'u' the
5.1 Print "Character is vowel"
6.0 else
6.1 Print "Character is consonent".
7.0 end if
8.0 end.

Q#8:-

Solution:-

1.0 Start
2.0 Declare year.
3.0 Print "Enter year:"
4.0 Input year
5.0 If year % 4 = 0 then
5.1 Print "Leap year"
6.0 else
6.1 Print "Not a leap year"
7.0 end if.
8.0 end.

Q#9:-

Solution:-

1.0 Start
2.0 Declare age.
3.0 Print "Enter age of candidate"
4.0 Input age
5.0 If age ≥ 18 then
5.1 Print "Candidate eligible to vote"
6.0 else
6.1 Print "Candidate non eligible to vote".
7.0 end if
8.0 end.

Q#10:-

Solution:-

```
1.0   Start
2.0   Declare total
3.0   Print "Enter total marks: "
4.0   Input total.
5.0   If total >80 then
  5.1   Print "Grade is A+".
6.0   else if total >75 then
  6.1   Print "Grade is A".
7.0   elseIf total >70 then
  7.1   Print "Grade is B".
8.0   else if total >65 then
  8.1   Print "Grade is C".
9.0   else if total >60 then
  9.1   Print "Grade is D".
10.0  else total >= 50 then
  10.1  Print "Grade is E".
11.0  else
  11.1  Print "Grade is F".
12.0  end if
13.0  end.
```

Q#11:-

Solution:-

```
1.0   Start
2.0   Declare temperature
3.0   Print "Enter temperature of weather"
4.0   Input temperature
5.0   If temperature >45 then
  5.1   Print "Warm".
6.0   else if temperature >20 then
  6.1   Print "Normal".
7.0   else if temperature <= 20 then
  7.1   Print "COOL".
8.0   else
  8.1   "False input".
9.0   endif
10.0  end.
```