



ASSIGNMENT (4)

1. Write a program that asks the user to input an integer, and prints whether that number is even or odd.
2. Write a program that asks the user to input an integer, and prints whether this number is positive, negative or zero.
3. Write a program that asks the user to enter two double numbers. The program should check if the first number is greater than twice the second number or not, and print the appropriate message.
4. Write a program that prints the absolute value of an integer entered by the user.
5. For two integers entered by the user, write a program that checks if the first number is divisible by the second or not, and print the appropriate message.
6. Write a program that calculates the price of a ticket according to the age of the passenger. The discounts are given in the following table:

Age	Discount
Age<12	75%
18>Age>=12	50%
25>Age>=18	25%
Age>=25	0%

Both, the age of the passenger and the ticket price are inputs. The program calculates and prints the net price after subtracting the discount.

7. Write a program that asks the user to enter his/her GPA, and prints the corresponding grade, according to the given GPA ranges:

GPA	Grade
3.4 – 4.0	Excellent
2.8 – 3.39	Very Good
2.4 – 2.79	Good
2.0 – 2.39	Satisfactory
0.0 – 1.99	Fail



ARAB ACADEMY FOR SCIENCE & TECHNOLOGY
COURSE: INTRODUCTION TO COMPUTER PROGRAMMING
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- Write a program that asks the user to enter three integers. The program should compare the three numbers and print the maximum.
- Write a program that asks the user to enter the month as an integer (e.g. 4). Then, the program prints the season according to the following table:

Months	Season
3,4,5	Spring
6,7,8	Summer
9,10,11	Autumn
12,1,2	Winter

- The program asks the user to input his basic salary and the number of children he has. The employee pays taxes of 5% of his salary if his salary is less than 2000 or he has more than three children. Otherwise, the employee pays taxes of 10%. The program calculates and prints the net salary after deducting the taxes amount.
- Write a Java program that controls a robot that serves in a café. This café presents fast food and regular meals. The robot should ask the guest whether he/she would have a sandwich or a main dish.

If the guest will have sandwich, the robot should then ask to choose one of the following items:

Item	Price
Cheese Burger	6 pounds
Double Cheese Burger	8 pounds
Fish Fillet	10 pounds
Chicken Fillet	12 pounds

If the guest will have a main dish, the robot should then ask to choose one of the following items:

Item	Price
Grilled Chicken	30 pounds
Mixed Grill	40 pounds
Fish & Shrimps	50 pounds

The robot should also ask the guest if he/she would like to have (Drink & Fries) with the order. If yes, a value of (5 pounds) is added. Finally, if the guest will eat in the café, a 12% service charge will be added. The robot should calculate and display the total amount of charge.



12. Write the output of each of the following programs:

```
int x=5;
if(x>=0)
x=x+3;
else if(x>3)
x++;
else
x=x*3;
System.out.print(x);
```

```
int x=3;
if(x<0)
x=x-1;
if(x!=1)
x=x*2;
else if(x==4)
x=x+3;
System.out.print(x);
```

```
int x=3;
if(x>0)
{
x=x+2;
if(x>1)
x--;
else if(x>2)
x=x*3;
}
else if(x>2)
x-=4;
if(x>2)
x--;
System.out.print(x);
```