Assingment 1

Q1. Number is Even or odd?

Ans. ① Enter a number (n);
② if n%2 ==0
③ Number is even.
④ else its odd.

Q2. Find Factorial of a given number?

Ans. ① Enter a number (n) for which to find factorial
② define int variable a =1.
③ Using for loop in range (2<i<n) i++.
④ a = a*i
⑤ SOP (a)

Q3. Factorial of a number using recursion?

Ans ① Enter a number (n)
② Making a method fact(n)
③ define variable(a = 1).
④ In main method calling method fact(n)
⑤ a = n* fact(n-1)
⑥ SOP (a).

Q4. Swap 2 variables without using 3rd variable ?

Ans.
① Enter 2 number a & b.
② a = a + b;
③ b = a - b;
④ a = a - b;
⑤ SOP (a, b)

Q5. Check wether a number is positive or negative ?

Ans.
① Enter a number (n)
② if (n ≥ 0);
③ Number (n) is positive.
④ else { number is negative }

Q6. Whether a given number is leap year or not ?

Ans
① Enter a number (n);
② if (n % 4 == 0)
③ ~~Aistcop~~ n is leap year
④ else { n is not a leap year }

Q7. Write program to print 1 to 10 without using loop ?

① ~~Ent~~ Make function / method
② Recall the function again.
③ Put an if cond^{n} for i < 10;

28. Program to print digits of a given number?

Ans ① Enter int str a
② b = a.length()
③ typecast str a to int and store in 'c'. (c=(int) a)
④ for (i=0; i=b; i++)
⑤ int d = c% 10
⑥ int c = c/10
⑦ print (d).

29. Print factors of a given number?

Ans. ① Enter a number n.
② Put for loop (③) (i=1; i<n; i++)
③ If n%i == 0
④ Print i
⑤ else continue.

Q10. Print sum of digits of a given number?
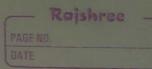
Ans ① Enter a number (n)
② Then c = length of (n).
③ for (i=0; i<=c; i++)
④ a = n% 10
⑤ n = n/10
⑥ int Sum = Sum+a
⑦ SOP (sum)

Q11 Program to find smallest of 3 numbers? (a,b,c)

Ans.
① Enter (input) number a, b, c.
② if (a ≤ b && a ≤ c)
   SOP (a + " is smallest")
③ else if (b < c)
   SOP (b + " is smallest")
④ else if (b > c)
   SOP (c + " is smallest")

2. Add two numbers without using arithematic operators?

Ans
① input two number a & b.
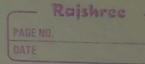② find min Smallest number from a & b. (Math. min ())
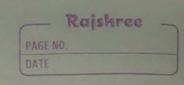③ using for loop. (suppose a is small)

④ for (i = a; i < a; i++)

⑤   b++;

⑥ Print (b).

Q13. Program to reverse a number?

Ans ① Enter input number (n): integer
② Store length of ~~str~~ (n) in c. (c = len (n))
③ for (i=0 ; i<=c; i++)
④ int a = n % 10
⑤ .. n = n / 10
⑥ str rev = " "
⑦ rev = rev + a
⑧ SOP (rev)

Q14. Program to find GCD of 2 given numbers?

Ans ① Enter number a, b.
② C = Math. min (a, b)
③ ~~if (c~~ While (c > 0) {
④ if (a % c ==0 ~~&&~~ && b % c == 0) {
⑤ ~~return c~~ }
⑥ ~~return c =;~~
⑥ result - -;
⑦ return result
⑧ SOP (result)

Q15. Program to find LCM of 2 given numbers?

Ans ① ~~Enter numbers a, b~~
② ~~find min of a & b~~
③ ~~if min is a' then a% a==b & b%.a == 0~~
④ ~~return b~~
⑤ ~~else if min is b then a%. b == 0 && b%.b == 0~~
~~return a~~

~~⑥~~

① Enter 2 number a & b.

② $LCM = \dfrac{a \times b}{GCD(a, b)}$

③ To find GCD of a, b:

④ Run a loop for a & b from 1 to max of a & b.

⑤ Check if no. divides both a & b.

if yes the store it.

⑥ Print the stored number.

Q 17. Check if given number is pallindrome n No??

Ans- ① Input a number (n). (Integer)

② int a = n % lo;

③ int sum = sum + a;

③

Q 19. Print Even number series 2, 4, 6, 8 - - - -

int i;

Ans- ① for (i=2; i<loo; i++)

② i++;

③ Print (i)

Q 20. Print odd number series 1, 3, 5 - - - - -

Ans. ① int i;

② for(i=1; i<loo; i++)

③ i++;

④ print (i)