

Therap Ques:(dev)

total 9 ta:

1. ekta password deya thakbe string akare...check korte hobe valid kina?
valid hoile "yes" ar na hoile "no" print korte hobe.
sortho: minimum 1. ekta lowercase and ekta upercase letter thakbe
2. ekta digit thakbe
3. @#\$%& ei type er koyekta charackter er moddhe 1ta thakbe

2. int func(int n) **infinite recursion**

```
{  
    if(n==100)  
        return 1;  
    return func(n-1)+func(n-2);  
}
```

ei function e output ki hobe? describe korte hobe

3. **ekta linked** list er node define korte hobe and node insert korte hobe
4. **Binary tree** er last node gula bade(jegular child nai) print korte hobe
5. 2 ta time deya thakbe(24 hours format) eder moddhe time difference ber korte hobe.
6. ekta sentence e longest word er length ber korte hobe
7. 8. 9. mone nai but uporer gula theke easy chilo

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Selise Ques:

total 8 ta ques chilo 2 set(amader group er ta dicchi)

1. 2 ta string deya thakbe bolte hobe 2nd ta 1st er tar substring kina?

example:

1st string: abcde

2nd string: ade or acd or abc

output: 1st er ta substring na but porer 2ta substring(because pore 2ta string e letter gula consecutive)

2. ekta number er square root ber korte hobe point er por 10 digit porjonto but kono function use kora jabe na

3. samucha problem: onek gula samucha deya thakbe($3 \leq n \leq 1000$) and n ta samucha r unhealthiness deya thakbe ($1 \leq m \leq 1000$) 2 jon friend er moddhe emon bhabe bhag korte hobe jeno unhealthiness er difference 0 or 1 hoy.

jodhi ebhabe bhag kora jay tahole "yes" print korte hobe na hole "no" print korte hobe.

4. ekta string dibe ar number dibe...string ta middle e rekhe baki jaygay "-" print dite hobe jeno length number er saman hoy

input: saif 10

output: ---saif--- (total length 10 thik ache)

input: saif 9

output: ---saif-- (total length 9 thik ache, number bejor hoile samne beshi ta print korte hobe --saif--- eita output hobe na erokom)

5. page er ekta problem chilo previous year theke aschilo(written exam folder e 2 number ques ta)

6. ekta number deya thakbe amake 2ta prim number ber korte hobe jeno tader summation number er saman hoy(multiple thakle ekta print korlei hobe) an jodhi sombhob na hoy "no" print korte hobe

example:

input: 8

output: 3+5

7. Binary tree generate korte hobe and preorder postorder or inorder e print korte hobe(je kono ekta korlei hobe)

8. 2 ta big number deya thakbe(je kono length hote pare) amader eder multiplication korte hobe.

baki set rizvi bolte parbe tode 2 group e 5 ta ques same chilo mone hoy sure na but ques gula erokom e

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Enosis ques:

enosis er jonno previous year er ques gula dekhlei hobe

koyekta ques:

1. string reverse
2. ekta sentence deya thakbe word reverse korte hobe
input: I am a student.
output: student. a am I
3. ekta loop e 1-10 then 10-1 print korte hobe
4. file theke number input niye summation ber korte hobe.
5. ekta number er prime factor ber kora.
6. normal recursion er problem chilo
7. ekta form deya ache ki ki improve kora jay?
8. password er 5 ta validation likha.
9. analytical 4 ta 4 mark er ekdom easy chilo...dekhlei para jabe

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Samsung:

DFS, knapsack, Bicoloring, shortest path, Math er ekta problem deya thakbe time 3 hours

1. Difference between sorting algorithm, complexity etc. Also lots of OOP and software engineering related questions
2. Questions from Computer Architecture, Digital electronics and From ur Projects
3. good knowledge on OOP
4. coding question on backtracking
5. Given a graph, check either it is bicolourable or not.
6. What is "Iteration"
7. Object oriented concept. Schedule question. Operating system knowledge. Thread & mutex

milaite parlei job confirm (:P)

kono built-in function use kora jabe na. emon ki stack queue egula banaite hobe.

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Appscore:

1. 2 ta file e kicho string deya thakbe...amader ber korte hobe 1st and 2nd file e ache erokom string. 2nd file e ache but 1st file e nai erokom na.

input:

file1 file2

10101 10100

10000 10101

11111 10000

output:

10101

10000

2. 0 theke 15 porjonto 16 ta team er numbering kora ache...tara knockout khelbe...1st level e 8 ta match...2nd level e 4 ta match...3rd level e 2 ta and 4th level e 1 ta

match hobe...1st level e 0 1 er sathe 2 3 er sathe 4 5 er sathe ebhabe 14 15 er sathe khelbe...ekhon 2 ta team er number dibe ber korte hobe tara koto number level dekha

hobe jodhi bad na pore jemon 0 3 deya thakle 2 number level e dekha hobe.

3. onek gula string deya ache string er regular expresion : [0-1].[0-1].[0-1](-alpha/beta) erokom thik mone nai. amader sort korte hobe emon bhabe jeno, first e 1st er number onojaye..1st

number same hole 2nd number onujaye...2nd ta same hole 3rd ta onujaye...3rd ta same alpha beta onujaye hobe(nao thakte pare)

input:

1.0.1-alpha

1.0.1

1.0.1-beta

1.1.1

output:

1.0.1-alpha

1.0.1-beta

1.0.1

1.1.1

4. void funcA(int n)

{

if(n>0)

```

{
    funcA(n-1);
    cout<<n<<" ";
    funcA(n-1);
}

}

int main()
{
    funcA(4);
    return 0;
}

```

output ber korte hobe

5. ekta 8 gb ram er pc te 800 gb data niye ki bhabbe kaj korbo ei related question chilo
6. kicho imformation deya chilo database batle design korte bolche and kicho query chilo
7. dev ar span er moddhe parthoko chilo
8. mail er regular expression likhte bolche (previous year e therap e regular expression chilo...so eta important)
9. ekta web browser er system design korte bolbe

erokom onek gula ques chilo mone nai...ami code gula dekhte dekhte time chole geche tobe important code gula kora..karon ami code chara kicho kori ni.

time: 2.30 hour

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Others:

1. ekta string deya thakbe preorder postorder inorder e likhte hobe(code na korleo hobe)
2. bitwise operation sikhe rakha valo (left shift, right shift, and, or etc operation 2 ta number er)

3. int double float etc variable koto bytes calculation kore print echara struct variable pointer etc koto byte calculation kore print kora laghte pare

4. structure pointer linked list(node define, node add, node delete, print kora or reversely print kora....etc linked list theke sob jaigay ekta asbei tai eta valo kore shikhte hobe)

5. BST valo kore shikhte hobe

6. ekta number deya thakbe eta 2 kingba 4 dhara bhag kora jabe kina(reminder 0 hobe) ber korte hobe but kono +-*/% operator use kora jabe na.

7. sort(bubble, insertion, selection, quick, merge)

8. complexity ber korte bolbe

9. `int i = 2 ;`

```
int ans = i++ + i++ + i++ ;
```

```
cout << ans << endl ;
```

output ki hobe? erokom ques thakte pare

10.

Prepared BY SAGOR(13 Batch)

Sorry bole nicchi jodhi kono bhul thake ba information gap thake.