Worksheet 1

Domain Winter Winning Camp

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Section: DWWC - 43 Date of Performance: 3rd Jan, 2023

Subject Name: IT Skills

Question 1:

Important Pages on CodeChef

Code:

```
#include <iostream>
using namespace std;

int main() {
    // your code goes here
    int a, b;
    cin>>a>>b;
    if(a==0) {
        cout<<"https://www.codechef.com/practice";
    }
    else if(b==0) {
        cout<<"https://www.codechef.com/contests";
    }
    else if(a==1 && b==1) {
        cout<<"https://discuss.codechef.com";
    }
    return 0;
}</pre>
```

Submission ID: <u>84842132</u>

Time: 0.00s

Question 2:

Status: Correct Answer

Fire and Ice

```
#include <bits/stdc++.h>
using namespace std;
#define int long long
#define mod 1000000007
string addition(string s1, string s2){
  int n1=s1.length();
  int n2=s2.length();
  string ans="";
  int c=0;
  while(n1 && n2){
    n1--;
    n2--;
    int tmp=s1[n1]-'0'+s2[n2]-'0'+c;
    c=tmp/10;
     ans+=(tmp%10)+'0';
  while(n1){
    n1--;
    int tmp=s1[n1]-'0'+c;
    c=tmp/10;
    ans+=(tmp\%10)+'0';
  while(n2){
```

```
n2--;
    int tmp=s2[n2]-'0'+c;
     c=tmp/10;
    ans+=(tmp%10)+'0';
  if(c!=0)
     ans+=c+'0';
  reverse(ans.begin(), ans.end());
  return ans;
void solve(string f[]){
  int n, m; cin \gg n \gg m;
  int curr=0;
  for(char c:f[n-1]){
     curr=curr*10+c-'0';
     curr=curr%m;
  cout << (curr*2)%m << endl;
  return;
}
int32 t main(){
  int t=1;
  cin >> t;
  string f[1001];
  f[0]="1", f[1]="1";
  for(int i=2; i<1000; i++){
     f[i]=addition(f[i-1], f[i-2]);
  for(int i=0; i<t; i++)
    solve(f);
  return 0;
}
```

Status: ✓ Correct Answer		Submission ID: <u>84842431</u>
Time: 3.16s		
Sub-Task	Task #	Result (time)
1	0	AC (1.711140)
Subtask Score: 10.00%		Result - AC
2	1	AC (3.050390)
Subtask Score: 30.00%		Result - AC
3	2	AC (3.162180)
Subtask Score: 60.00%		Result - AC
		Total Score = 100.00%

Question 3:

Mixtures

```
#include <bits/stdc++.h>
using namespace std;
const int N = 101;
int n, a[N], pre[N], dp[N][N];
int main() {
  while(cin>>n){
```

```
for(int i=1; i \le n; i++){
       cin >> a[i];
       pre[i] = pre[i-1] + a[i];
     }
    for(int k=n; k>=1; k--){
       for(int r=k; r<=n; r++){
          if(k == r)
            dp[k][r]=0;
            continue;
          if(r-k == 1){
            dp[k][r] = a[k]*a[r];
            continue;
          dp[k][r] = INT\_MAX;
          for(int p=k; p<r; p++){
            int a = (pre[p] - pre[k-1])\%100;
            int b = (pre[r] - pre[p])\%100;
            int c = a*b;
            dp[k][r] = min(dp[k][r], dp[k][p]+dp[p+1][r]+c);
    cout << dp[1][n] << endl;
  }
      return 0;
}
```

Status: ✓ Correct AnswerSubmission ID: 84842640

Time: 0.01s

Question 4:

Binod and Chocolates

```
#include <iostream>
using namespace std;
int main() {
      int x,y,z,sum;
      cin>>y;
      while(y--)
        cin>>x>>z;
        sum=x+z;
        if(x\%3==0)
           cout << "YES\n";
        else if(sum\%3==0)
         {
           cout << "YES \n";
        else if(z\%3==0)
           cout << "YES\n";
        else
```

```
{
     cout<<"NO\n";
     }
}
return 0;
}</pre>
```

```
Status: ✓ Correct Answer

Submission ID: 84842913

Time:
0.00s
```

Question 5:

Special Fibonacci

```
#include <bits/stdc++.h>
#include <iostream>
using namespace std;
#define ll long long
int bitwise(int num,int a,int b)
{
   if(num==0)
   {
      return a;
   }
   if(num==1)
   {
      return b;
```

```
if(num==2)
{
    return (a^b);
}

return bitwise(num%3,a,b);
}
int main() {
    // your code goes here
    int t;
    cin>>t;
    while(t--){
        int a,b,num;
        cin>>a>>b>>num;
        cout<<br/>bitwise(num,a,b)<<"\n";
}
    return 0;
}</pre>
```

```
Status: ✓ Correct Answer

Submission ID: 84843158

Time:
0.00s
```

Question 6:

Gold Mining

Code:

```
#include <bits/stdc++.h>
#include <iostream>
using namespace std;
#define ll long long
int main() {
      int t;
      cin>>t;
      while(t--){
       int n,x,y;
       cin>>n>>x>>y;
       if((n+1)*y>=x){
         cout<<"YES"<<endl;
       }else{
         cout << "NO" << endl;
       }
      return 0;
}
```

Status: ✓ Correct Answer		Submission ID: <u>84843343</u>
Time: 0.01s		
Sub-Task	Task #	Result (time)
1	1	AC (0.004231)
1	2	AC (0.005967)
1	3	AC (0.005986)
Subtask Score: 100.00%		Result - AC

Question 7:

Chef on vacation

```
#include <iostream>
using namespace std;

bool check (int x,int y,int z){
  if((x+y)<=z){
  return true;
  }
  return false;
}

int main() {
  int t;
  cin>>t;
  while(t--){
   int x,y,z;
   cin>>x>>y>>z;
```

```
check(x,y,z) ? cout<<"YES"<<endl : cout<<"NO"<<endl;
}
return 0;
}</pre>
```

Status: ✓ Correct Answer		Submission ID: <u>84843670</u>
Time: 0.01s		
Sub-Task	Task #	Result (time)
1	0	AC (0.003746)
1	1	AC (0.005716)
Subtask Score: 100.00%		Result - AC
		Total Score = 100.00%

Question 8:

Chef and the wildcard matching

```
#include <bits/stdc++.h>
using namespace std;

int main() {
    // your code goes here
    int t;
    cin>>t;
    while(t--)
    {
```

```
string a,b;
cin>>a>>b;
int d=0;
for(int i=0;i<a.length();i++)
{
    if(a[i]==b[i])
    d++;
    else if((a[i]=='?'||b[i]=='?'))
    d++;
}
if(d==a.length())
cout<<"Yes"<<endl;
else
cout<<"No"<<endl;
}
return 0;
}</pre>
```

```
Status: ✓ Correct Answer

Submission ID: 84843858

Time:
0.00s
```

Question 9:

Janmansh and Games

```
#include <iostream>
using namespace std;
int main() {
```

```
// your code goes here
int t;
cin>>t;
while(t--){
   int x,y;
   cin>>x>>y;
   int z=x+y;
   if(z%2==0){
      cout<<"janmansh"<<endl;
   }
   else{
      cout<<"jay"<<endl;
   }
}
return 0;
}</pre>
```

```
Status: ✓ Correct Answer

Submission ID: 84844208

Time:
0.00s
```

Question 10:

The Lead Game

```
#include <bits/stdc++.h>
#include <iostream>
using namespace std;
#define ll long long
```

```
int main() {
        int n;
        cin>>n;
        int winner=0;
        int player1=0,player2=0;
        int lead=0;
        while(n--){
          int p1,p2;
           cin>>p1>>p2;
          player1+=p1;
          player2+=p2;
           int x=abs(player1-player2);
           if(x>lead){
             lead=x;
             player1>player2?winner=1:winner=2;
           }
        cout<<wirner<<" "<<lead<<endl;
      return 0;
}
```

```
Status: 
Correct Answer

Submission ID: 84844523

Time:
0.01s
```